A MULTIFACETED EXPLANATION OF ANTISOCIAL BEHAVIOUR USING THEORY OF PLANNED BEHAVIOUR, SOCIAL IDENTITY THEORY, AND TECHNIQUES OF NEUTRALIZATION.

A Dissertation Submitted to the

College of Graduate and

Postdoctoral Studies in Partial

fulfilment of the Requirements

for the Degree of Doctor of Philosophy

in the Department of Psychology,

University of Saskatchewan

Saskatoon

By

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March 3, 2021.

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ABSTRACT

The Theory of Planned Behaviour, Social Identity Theory, Cognitive Dissonance, and Techniques of Neutralization were used in this study to investigate whether situational variables could account for antisocial behaviour. In the first phase, an elicitation study was conducted to determine undergraduate Psychology students' (N = 97) attitudes, subjective norms, and perceived behavioural control associated with three types of behaviour: legal and normed, illegal and normed, and illegal and not normed. In addition to determining participants' views on attitudes, subjective norms, and perceived behavioural control, valued groups (i.e., groups who are valuable to the respondents) were ascertained from the elicitation study. The second phase of this study involved the manipulation of three situational variables in hypothetical scenarios: the three behavioural types, the valued groups of parents and friends, and six types of neutralizations (i.e., reasons that allow the behaviour to be acceptable) in scenarios. Undergraduate Psychology students and staff at the University of Saskatchewan (N = 478) indicated acceptability of the described behaviours. Findings indicated that antisocial behaviours were enacted as the result of situational variables, specifically, the three behavioural types, the presence of the valued groups of parents and friends, and six types of neutralization. As expected, the three variables interacted to affect the degree to which participants endorsed the behaviour described in the scenario. Structural equation modelling was used to investigate six base model scenarios that reflected the three types of behaviours, the two types of valued groups, and six types of neutralization. The fit of the models decreased as the legality and norming of the behaviour moved from legal and normed to illegal and not normed, indicating that individuals endorse both antisocial and prosocial behaviours that are enacted based on situational variables. The evidence from this study highlights the importance of policy to prevent the development of antisocial attitudes. That is, it demonstrates the importance of limiting the exposure of individuals to the situational variables that increase the risk of antisocial and criminal conduct. The prevention of crime is possible with policies that are built on empirical evidence such as those found in this study.

Keywords: Theory of Planned Behaviour, Social Identity Theory, Techniques of Neutralization, Cognitive Dissonance, Structural Equation Modeling, Antisocial Behaviour.

ACKNOWLEDGEMENTS

Dr. Steve Wormith, there are no words to thank you for the honour it was to work with, learn from, and get to know you. Thank you for supporting me in my formal and informal learning, for mentoring my teaching practice, and for treating me like a colleague. You were an exceptional human being and you are missed. Thank you for everything. Sleep in peace.

Thank you to Dr. Tammy Marche, who graciously, and without judgment agreed to support my completion of this journey. It has been a privilege to learn from you. I cannot thank you enough for taking a chance on me. It has been a pleasure to experience your support and guidance. Thank you to the members of my Advisory Committee, Dr. Lisa Jewell, Dr. Phil Woods, and Dr. Mak Olver. Your support and guidance throughout this research project along with the support of the Applied Social Psychology program has been invaluable. A very special thank you to Joni Mormon who has supported me as a student, as a sessional instructor, as a colleague and as a confidante.

Thank you to my friends who have been nothing but supportive of this journey in every way possible. Carolyn C., thank you for always making sure I am taking care of myself. Carolyn and Brian, thank you for the talks, support, care packages, and lunches! Thank you, Lisa, for being a sounding board and for the lunches, dinners, and visits! Thank you, John and Deb, for your friendship, support, and visits with your amazing boys!

Thank you to my family who has supported me unconditionally and without judgement. I would not have thought we would make so many of my dreams come true, but I know I would not even have had these dreams without you.

Finally, but most importantly, to the OGs! Thank you, Mommy and Zahra! Acknowledging you in the culmination of a journey I conceived of 13 years ago and you both supported, cheerlead, paid for, and never doubted especially when I doubted myself is a drop in the bucket to what you

both have supported me to achieve, but thank you. I would not be who I am or on this journey without you.

DEDICATION

To all the Black, Indigenous, and People of Colour, whose lives have been harmed and taken because of violence that was fueled by hate. You Still Matter. Your Life Still Matters.
Rest in Power.

-Briana J. Williams, 2020

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INTRODUCTION

Antisocial behaviour is often explained using theories that indicate that such behaviour results from a disposition, that is, from an innate, stable, internal construct (Ajzen, 1987; Andrews, Bonta, & Hoge, 1990). These theories consider specific characteristics of the individual at the time of the specific behaviour. These specific characteristics pertain to the personal situation of the actor. For example, an individual's level of education, an individual's parental level of education, and a history of antisocial behaviour (Andrews, Bonta, & Hoge, 1990) pertain to the personal situation of an actor. It is apparent that some of these individual variables are dynamic and are therefore believed to be changeable; however, on further examination of the individual situation, these variables may not be subject to change. For example, the level of education an individual has attained is considered a dynamic factor but for many people, this is not something they can change based on their life circumstances. In attempting to explain antisocial behaviour, individual characteristics, for example, education level, are considered in current theories, but not the context of why the level of education was attained.

Dispositions are stable and are theorized to exert a pervasive influence on a broad range of behaviour and are therefore observable in behaviour (Ajzen, 1987). For example, someone who helps a stranger in need is considered altruistic while a person who steals is considered a thief because the singular behaviour is believed to stem from a stable disposition within the individual. Theories that explain behaviour based on what is internal, stable dispositions are considered dispositional theories. One such dispositional theory is the Theory of Planned Behaviour. According to Ajzen (1987), who proposed the Theory of Planned Behaviour, personality traits and attitudes "are conceived of as relatively enduring dispositions that exert pervasive influence on a broad range of behaviors" (p.1). As a result, personality traits and attitudes are expected to be apparent in observable behaviour. It has been noted, however, that as an explanation of behaviour, dispositional theories are subject to the following two limitations: (a) there is inconsistency in behaviour across observations, and (b) general dispositions are

expected to predict all behaviour within that disposition but they do not (Ajzen, 1987; Ajzen &Fishbein, 1977; Epstein, 1983; Himmelstein & Moore, 1963; Mischel & Peake, 1982).

In terms of the first limitation, Ajzen (1987), Epstein (1983), and Mischel and Peake (1982) all noted that there is little consistency between a single action performed on one occasion and another single action performed on another occasion. This means there is little consistency of behaviour across time and situation. It has been suggested that to understand behaviour it is essential to examine the pattern of different responses a person displays across situations (Ajzen, 1987; Mischel & Peake, 1982). As for the second limitation, it has been suggested that dispositions should explain behaviour, however, this has not always been the case as there is no consistency with the prediction of specific behaviour from global attitudes (Ajzen, 1987; Ajzen & Fishbein, 1977; Himmelstein & Moore, 1963) or global personality traits (Ajzen, 1987; Epstein, 1979; Gibb, 1969; Hall & Hall, 1974; Leon & Roth, 1977; Mann, 1959; Mischel, 1984; Mischel & Peake, 1982; Schifter & Ajzen, 1985; Westoff, Potter, Sagi, & Mischler, 1961). Contrary to what dispositional explanations suggest, a single behaviour may be a poor indicator of a disposition, whether it be a personality trait or an attitude (Ajzen, 1987).

Given the limitations of dispositional explanations of antisocial behaviour, the purpose of the current study was to investigate the extended Theory of Planned Behaviour (Ajzen, 1991), which includes both dispositional and situational aspects of behaviour. In the refinement of the theory, 'background factors' were included (Ajzen & Fishbein, 2005). These background factors are not described in detail in the theory, but rather a wide variety of cultural, personal, and situational factors are listed. These factors are divided into the categories of: (a) personal; (b) demographic; and (c) environmental factors (Ajzen & Fishbein, 2005). These background factors align nicely with the tenets of Social Identity Theory (Abrams & Hogg, 1998; Tajfel 1979). Abrams and Hogg (1998) stated that an individual can possess more than one attitude towards a behaviour, thereby strengthening the proposed limitations of the dispositional explanation of the Theory of Planned Behaviour (Ajzen, 1991). That is, an individual can enact behaviour that is not reflective of a general disposition, suggesting that an individual may be able to enact both prosocial and antisocial behaviour, simultaneously. However, according to Festinger (1957), an individual cannot have behaviour-value inconsistency since the individual would exist in a state of psychological dissonance. Therefore, if individuals can indeed possess more than one attitude towards a behaviour, then a way to resolve this dissonance is necessary. Sykes and Matza's

(1957) theory, known as the Techniques of Neutralization, posits several ways that this dissonance could be resolved. Sykes and Matza (1957) suggested that youth who act antisocially do not necessarily have an antisocial value system and that youth can express behaviour in violation of their values by using these techniques of neutralization to effectively resolve any cognitive dissonance that should occur (Festinger, 1957).

Therefore, a possible multifaceted explanation of antisocial behaviour was investigated in the current study by combining the three theories, Theory of Planned Behaviour (Ajzen, 1991), Social Identity Theory (Abrams & Hogg, 1998), and Techniques of Neutralization (Sykes & Matza, 1957), to determine whether this framework can explain antisocial behaviour. The combination of the three theories allows for the examination of situational factors of different behaviours that are salient to the decision to act or not to act. In the following sections, the Theory of Planned Behaviour (Ajzen, 1991), followed by Social Identity Theory (Abrams & Hogg, 1998), and then the Techniques of Neutralization (Sykes & Matza, 1957), are discussed in detail and they are then combined to propose a multifaceted explanation of antisocial behaviour.

1.1 THEORY OF PLANNED BEHAVIOUR

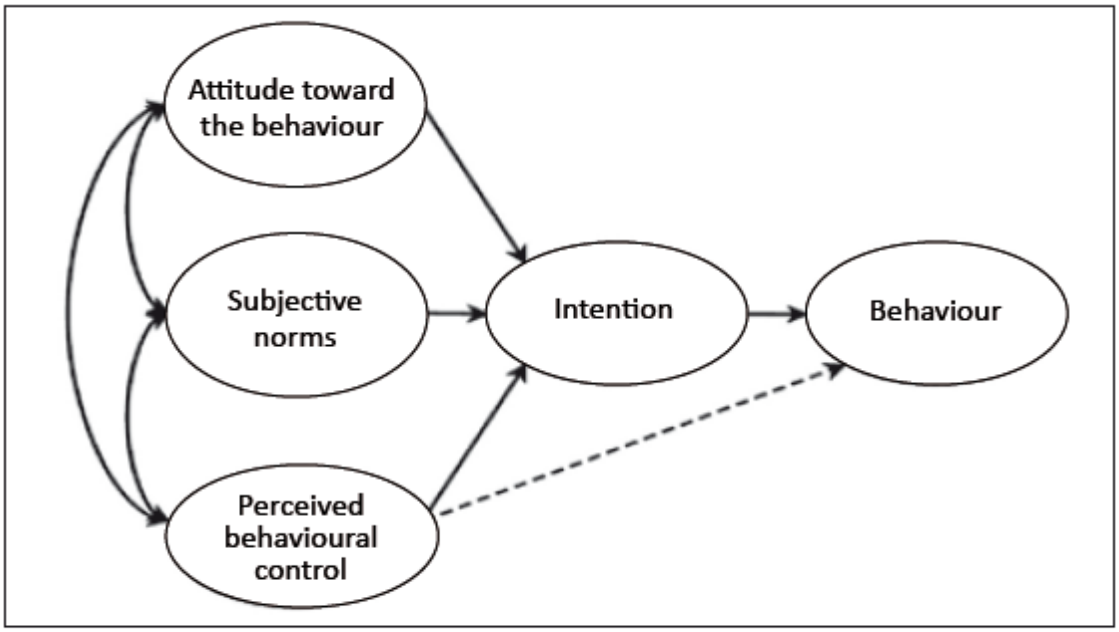
The Theory of Planned Behaviour is an evolution of the Theory of Reasoned Action (Fishbein, 1967), which was developed to predict the enactment of behaviour over which people have control. The Theory of Reasoned Action (Fishbein, 1967) is rooted in an expectancy-value concept in which the attitudes an individual holds towards an object or action is determined by expectations or beliefs specific to the object or action and an evaluation of those expectations or beliefs (Montaño & Kasprzyk, 2008). According to the Theory of Reasoned Action, the most important factors in determining an individual's behaviour are behavioural intention and the attitude towards the behaviour (Montaño & Kasprzyk, 2008). The limitation of this theory, which led to the Theory of Planned Behavior (Ajzen, 1991), was that the Theory of Reasoned Action (Fishbein, 1967), did not include a factor describing one's perception of control over acting or not, that is, perceived behavioural control (Montaño & Kasprzyk, 2008). This factor of perceived behavioural control was therefore included in the Theory of Reasoned Action (Fishbein, 1967), thereby resulting in the Theory of Planned Behaviour (Ajzen, 1991).

According to the Theory of Planned Behaviour, a person's intention to act or not is the most important and immediate predictor in the decision to act (Ajzen, 2005). Ajzen (2005) stated that there are three main predictors of the intention to act: (a) attitude towards the behaviour; (b)

subjective norms; and (c) perceived behavioural control. According to Ajzen (1991), the attitude towards the behaviour reflects the person's belief about the likely outcomes of the behaviour and the evaluations of those outcomes, which is also known as behavioural beliefs. Subjective norms include the beliefs about normative expectations of others and motivations to comply with these expectations, and they refer to the reflection of social influences on the specific behaviour. Perceived behavioural control refers to beliefs about one's ability to control the enactment of the behaviour. The intention to act is predicted with high accuracy by the attitude individuals have towards the behaviour, the subjective norms that individuals have about the behaviour, and their own perceived behavioural control over the behaviour in question (Ajzen, 1991). Because it was established that behaviour is predicted by behavioural intention and behavioural intention is predicted by attitudes towards the behaviour, subjective norms, and perceived behavioural control, it essentially means that behaviour is predicted by all four factors within the Theory of Planned Behaviour. The Theory of Planned Behaviour (Ajzen, 1991) is depicted in Figure 1.

Figure 1.1

Theory of Planned Behaviour



Source: Ajzen, I. (1991). Theory of planned behaviour. *Organizational Behaviour and Human Decision Processes, 50*, 182. http://dx.doi.org/10.1016/0749-5978(91)90020-T

The Theory of Planned Behaviour (Ajzen, 1991) is a general behavioural theory that has been empirically supported with different behaviours such as exercising, voting, donating blood, the use of protective gloves by health care workers, flossing, driving violations, condom use, and several other types of behaviour (O'Keefe, 2002). The Theory of Planned Behaviour (Ajzen, 1991), therefore has been used to explain an individual's logical decision-making process about intended behaviour. Ajzen (2005) proposed that this theory supports the possibility that an individual can possess different attitudes towards a behaviour and by extension having different social norms and different perceptions of behavioural control, which could change the enactment of the behaviour. To better understand the Theory of Planned Behaviour (Ajzen, 1991), each of the four factors is described in detail below. Following this, limitations and critiques of the theory are reviewed, which is then followed by a description of the empirical support for the Theory of Planned Behaviour (Ajzen, 1991).

1.1.1 ATTITUDE TOWARD BEHAVIOUR

According to the Theory of Planned Behaviour (Ajzen, 1991), attitude is one of the four factors that predicts behaviour. The attitude towards the behaviour includes the attitude towards acting in a specific way and the negative or positive evaluation of acting this way. That is, the predictability of the enactment based on the attitudes about the behaviour is assumed to be moderated by characteristics specific to the person acting, the situation, and the attitude the person holds about enacting the behaviour (Ajzen & Fishbein, 2005; Sherman & Fazio, 1983). Ajzen (2005) also noted that at any time, the attitude towards a behaviour is "determined by accessible beliefs about the consequences of the behaviour, termed *behavioural beliefs*" (p.123). For example, a consideration of the beliefs of rewards and costs of enacting the behaviour is completed before the behaviour is enacted (Ajzen, 2005).

Eagly and Chaiken (1993) defined an attitude as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavour" (p.1). They explained the psychological tendency as an internal state of the individual. The evaluating piece refers to all the possible variations of cognitive, affective, or behavioural evaluations (Eagly & Chaiken, 1993). Attitudes are believed to be the result of the beliefs that people have about the object and therefore intentions and actions follow from the attitude about the object (Ajzen, 2005). Attitudes are formed based on the saliency and ease of accessibility of the belief. That is,

the belief that is most salient and easily accessible is the belief that the attitude will be grounded in (Ajzen, 2005; Fishbein, 1963; Fishbein & Ajzen, 1975).

In describing the development of the Theory of Planned Behaviour, Ajzen (2005) proposed that the strength of an attitude is usually determined by characteristics which "closely resemble some of the attitude's secondary characteristics that are said to moderate the attitude-behaviour relation" (Petty & Krosnick, 1995; p. 58) and include characteristics like the importance of the domain of the attitude, certainty in a position held, direct or indirect experience with the attitude object, and investment in the attitude. Attitude strength plays a role in attitude activation; the stronger the attitude, the more automatic its activation. Stronger attitudes are proposed to develop as a function of direct involvement with the attitude object as opposed to secondhand or indirect interaction with the attitude object (Fazio, 1986; Fazio & Williams, 1986; Sherman & Fazio, 1983).

There has been extensive research investigating whether stronger attitudes allow for easier and quicker activation (Kline, 1987; Snyder & Kendzierski, 1982a & b; Zanna et al., 1980; Zuckerman & Reis, 1978). For example, Fazio and Zanna (1981) noted that direct experience with the attitude object had a consistent moderating effect on the attitude-behaviour relation. For example, more regular experience or contact with brushing your teeth will moderate the attitude towards teeth brushing.

According to Thurstone (1931), two individuals could have the same attitude and strength of attitude towards an object but still act in different ways towards the object. As a result, Ajzen and Fishbein (2005) noted that attitudes can predict behaviour, but the measure used to predict the behaviour must be specific to the attitude and the behaviour. It is important to note that attitudes tend to be influenced by both general attitudes as well as a variety of additional factors. Correlations between attitudes and behaviour are substantial only when these variables are assessed at compatible levels of specificity or generality; when the measures are incompatible, that is, not at the same level of specificity or generality, the correlations are very low and usually not significant (Ajzen & Fishbein, 2005). Therefore, to measure the attitudes towards a behaviour, the measures of attitude and behaviour must involve the same action, target, context, and time elements, which is known as the principle of compatibility (Ajzen, 1988; Ajzen & Fishbein, 1977). Specifically, what determines behaviour, such as whether someone cheats or not, has to be based on the same action of cheating, the exact target of why cheat, personal

context, and time. For example, in considering the behaviour of cheating on a final exam in the psychology of criminal behaviour, the target of why cheat would be that it is the only undergraduate course that tackles this subject matter and it is necessary to get a good grade to pursue graduate studies in the area. The personal context could be that the person works and is a parent so is not able to adequately prepare for the examination, and time means that the factors are all measured during the same time.

1.1.2 SUBJECTIVE NORMS

According to the Theory of Planned Behaviour (Ajzen, 1987), subjective norms is the second factor that predicts behaviour. According to Ajzen (2005), subjective norms refer to the social pressure that an individual feels to enact or not enact the behaviour. Given that social pressure is a perceived one, this factor is referred to in the theory as *subjective norms*. This means that it is important to understand which social group is salient at the time the decision to act is being made. This is important because social pressure can differ depending on the salient social group at the time of the decision-making process. Antecedents of subjective norms develop from the individual's beliefs that important others approve or disapprove of the behaviour (Ajzen, 2005). Ajzen (1991) noted that subjective norms were operationalized as a global perception of social pressure but Armitage and Conner (2001) pointed out that social pressure is rarely so direct or explicit and therefore many researchers have developed their own conceptualizations of subjective norms.

1.1.3 PERCEIVED BEHAVIOURAL CONTROL

Perceived behavioural control, the third factor in the Theory of Planned Behaviour (Ajzen, 1991), is theorized to predict behaviour and refers to the perception an individual has about his or her ability to control the behaviour. Bandura (1977 a & b, 1982, 1997) introduced the concept of perceived self-efficacy, which refers to the belief that a person has about his or her ability to carry out a certain behaviour. According to the Theory of Planned Behaviour, there is a relationship between perceived behavioural control and the intention to act (Ajzen, 1991). This relationship is posited to exist based on an underlying assumption. The underlying assumption is that individuals who believe they do not have the resources or opportunities to perform a behaviour are unlikely to act even if the other factors suggest acting (Ajzen, 2005). Also, as depicted in Figure 1, there is a link between perceived behavioural control and behaviour, which indicates the need to believe that one has adequate control of acting or not (Ajzen, 2005).

Effectively, Ajzen (2005) noted that perceived behavioural control can have a direct influence on behaviour since it can act as a level of control over the behaviour, as well as have an indirect influence through intentions.

Ajzen (2005) noted that perceived behavioural control is not consistent in predicting all behaviour and is likely a product of real-life constraints to acting, such as the opportunity to act. If perceived behavioural control and the motivation to act can predict the behavioural outcome, then it follows that perceived behavioural control as a variable can be used to predict "goal attainment independent of behavioural intention to the extent that it reflects actual control with some degree of accuracy" (Ajzen, 2005, p.119). Ajzen (2005) expanded on the role of perceived behavioural control, noting that it is believed to be a function of beliefs about the presence or absence of factors that facilitate or impede the performance of the behaviour. In short, perceived behavioural control is a function of the ability to control the enactment of the behaviour and that ability is based on experience, or lack thereof, with the behaviour, second or third-party experiences with controlling the behaviour, and other relevant factors.

1.1.4 BEHAVIOURAL INTENTION

Behavioural intention is the fourth predictive factor in the Theory of Planned Behaviour (Ajzen, 1991). It is proposed to be the direct predictor of behaviour and is proposed to be predicted by the three previous factors: (a) attitudes, (b) subjective norms, and (c) perceived behavioural control. Behavioural intention refers to an individual's plan to enact or not enact a specific behaviour (Fishbein & Ajzen, 1975). If the behaviour is under volitional control, the intent will result in the behaviour. Indeed, many theorists agree that the factor most predictive of behaviour is behavioural intention (Fishbein & Ajzen, 1975; Fisher & Fisher, 1992; Gollwitzer, 1993; Triandis, 1977). In other words, unless something is preventing the activity, individuals are expected to do what they intend to (Ajzen, 2005) and therefore the intention to act is predictive of the behaviour occurring.

There is empirical support for the theory's assumption that behavioural intention is the best predictive factor of behaviour in the theory. For example, Orbell et al. (2001), as cited in Ajzen (2005), found a 0.75 correlation between intention and using ecstasy, while Smetana and Adler (1980) found a 0.96 correlation between intention to have an abortion and enacting it (which was considered an antisocial behaviour at that time). A correlation of 0.96 is very high and could also be partially accounted for by the small N of 50. Regardless, Ajzen (2005) has

argued that there is empirical support for behavioural intention predicting behaviour. Behavioural intention can change over time (Ajzen, 2005), which can be a function of experience, new knowledge, and shifts in behaviour. As more time passes, there is a greater chance of change in one's intentions. Therefore, there is a greater possibility that intention becomes less predictive of behaviour over time (Ajzen, 2005). Given this information, it is therefore important to investigate the intention to carry out a behaviour, and its enactment, as closely in time as possible.

1.1.5 ENACTMENT OF BEHAVIOUR

The fifth factor in the Theory of Planned Behaviour (Ajzen, 1991), is the behaviour being enacted. Ajzen (1991) stated that humans intend to act in specific ways as a result of having favourable attitudes towards the behaviour and, unless they are deterred in some way, that intention is acted out and a behaviour occurs. It is important to note that there is a difference, according to Ajzen (2005) between performing an act and attaining a goal. An example of attaining a goal is losing weight or graduating with an Honours degree whereas an example of a behaviour is swimming (Ajzen, 2005; Ajzen & Fishbein, 1980; Bagozzi & Warsaw, 1990; Bandura, 1997). Ajzen (2005) explained the difference between a goal and a behaviour in that a behaviour always contains action whereas a goal does not, even though a goal may be attained by enacting several behaviours. Therefore, the Theory of Planned Behaviour (Ajzen, 1991), is not concerned with predicting goal attainment but with predicting the enactment of behaviour.

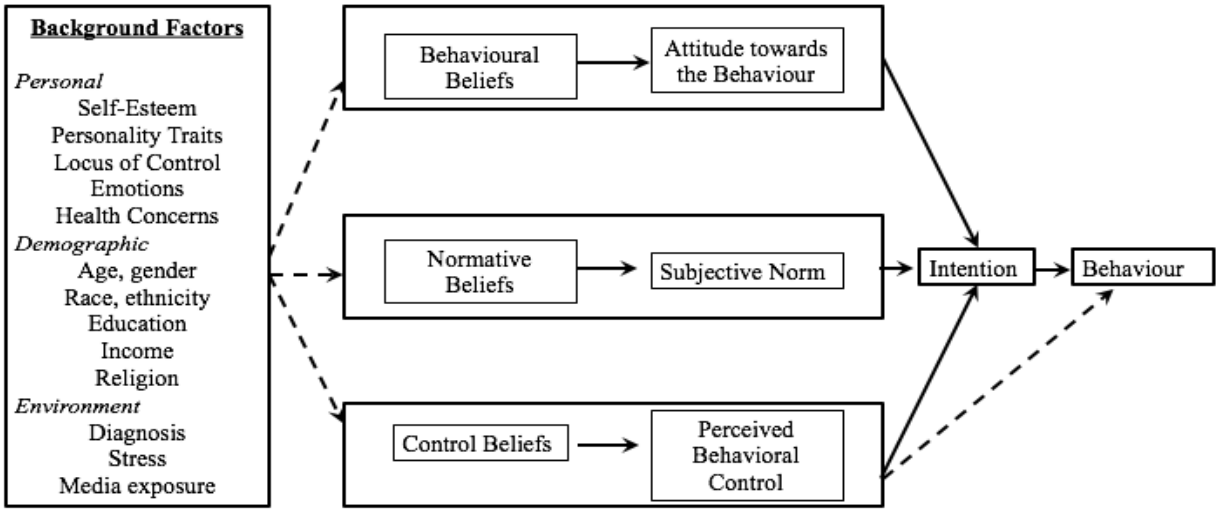
1.1.6 EXTENSION OF THE THEORY OF PLANNED BEHAVIOUR

As stated previously, the Theory of Planned Behaviour (Ajzen, 1991) evolved from an addition to the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). There was a further extension of the Theory of Planned Behaviour to include background factors. These background factors preceded the beliefs which preceded the previously discussed factors of attitude, subjective norms, and perceived behavioural control. These precursors are referred to as behavioural beliefs, normative beliefs, and control beliefs. Also, it was further suggested by Ajzen (2005) that there are background factors that predict these behavioural, normative, and control beliefs. The diagrammatic representation of this extension is shown in Figure 2. As depicted in the diagram, the intention to act is developed through a reasoned approach to explain and predict the behaviour. As a result, these beliefs form the basis on which attitudes are built. Also, subjective norms, the perception of control, intentions, and behaviour are therefore

believed to be reflective of the beliefs (Ajzen, 2005). Ajzen (2005) noted that once attitudes, norms, perceived behavioural control, and intentions are formed, they are then highly accessible and therefore readily available at any time to guide the individual as to how to behave. Attitudes, subjective norms, and perceived behavioural control towards the behaviour can be formed far in advance of the behaviour and can be used to guide behaviour in subsequent situations (Ajzen, 2005).

Figure 1.2

The Extended Theory of Planned Behaviour



1.1.7 CRITIQUES OF THE THEORY OF PLANNED BEHAVIOUR

It has been asserted that the Theory of Planned Behaviour, including the extension, is out of date, that it should be retired, and that the support it has garnered over the past 30 years has been overstated (Conner & Armitage, 1998; French & Hankins, 2003; Hall, 2015; Hardeman et al., 2015; Ogden, 2015; Sniehotta et al., 2014). For example, Sniehotta et al. (2014) published a review of the Theory of Planned Behaviour in which they concluded that: (a) no more correlational verifications of the theory are needed as the research is already saturated with correlational data; (b) there is a lack of experimental support for the theory in its ability to be used to develop interventions for behaviour change (Hardeman et al., 2015); (c) the theory only explains pre-planned behaviour (Conner & Armitage, 1998; French & Hankins, 2003); (d) the theory cannot explain emotionally charged or emotionally motivated behaviour (Conner & Armitage, 1998; French & Hankins, 2003); (e) there are better explanations for behaviour

(Conner & Armitage, 1998; French & Hankins, 2003); and (f) the field of health research has been amending the theory to address the needs of the researcher, which suggests that the theory is insufficient. Schwarzer (2015) noted that the extension of the theory is a result of researchers needing more from the theory than it presently offers. Also, he argues that retiring the theory would allow for more work on other theories, but he also argues that continuing to expand the Theory of Planned Behaviour (Ajzen, 1991), is still feasible.

Others have not been so convinced that it is time to retire the theory. Trafimow (2015) argued that the theory should not be discarded because it has provided many avenues of study and much information about human behaviour. Instead, Trafimow (2015) recommended acknowledging the theory's limitations and conducting research to make it more fulsome. Trafimow (2015) argued that there have been several experimental findings that support the usefulness of the theory. Trafimow (2015) stated that retiring the theory would be shortsighted given that its limitations are not due to the theory itself but are due to how it has been used in interventions and how it has been studied. In response to the critiques of the theory, it was also noted by Rhodes (2015) that many social-cognitive theories share similar limitations and that the constant use of correlational studies to test the theory is not the fault of the theory but is a result of the normed testing model over time. Even with this limitation, Rhodes (2015) argued that the Theory of Planned Behaviour (Ajzen, 1991), has been a framework for developing concepts of health behaviour and as a result, it should not be considered useless (Rhodes, 2015). These critiques of the Theory of Planned Behaviour (Ajzen, 1991), pertain to the relationship between the factors of attitude, subjective norms, perceived behavioural control, intention, and behaviour in the original version and do not refer to the background factors in the extended theory. Finally, Abraham (2015) argued that the extended Theory of Planned Behaviour is a good theory to have in the toolkit as some researchers do not test theories; rather their work is focused on implementing programs that can support behaviour change in the public health arena.

The critiques of the Theory of Planned Behaviour are valid in that there are limitations to the theory, however, they are not enough to support the retirement of the theory. In fact, the limitations support further amendments to the theory with more robust statistical analytical methods. Findings from research using the Theory of Planned Behaviour support further extensions through studying it in conjunction with other social psychological theories. In the

following section, empirical support for the predictive ability of the Theory of Planned Behaviour is reviewed.

1.1.8 EMPIRICAL SUPPORT FOR THE THEORY OF PLANNED BEHAVIOUR

There have been several studies that support the ability of the theory to predict behaviour (Albarracín et al., 2001; Armitage & Conner 2001; Armitage & Conner, 2010; Ajzen, 2005; Godin & Kok 1996; Hagger et al., 2002; Sheeran & Taylor 1999). For example, Armitage and Conner (2001) completed a meta-analytic review of research using the theory and noted that it predicted behaviour well. They noted that across 154 studies, the factors of attitudes, subjective norms, and perceived behavioural control accounted for 39% of the variance in intention, while intentions and perceived behavioural control accounted for 27% of the variance in behaviour across 63 studies. Therefore, Armitage and Conner (2001) found empirical support for use of the theory to predict intention and behaviour with the caveat that the prediction for self-reported behaviour was stronger than for observed behaviour. Furthermore, Armitage and Conner (2010) found good internal consistency reliability and test-retest reliability for the factors of beliefs, attitudes, intentions, and behaviour as well as support for the inclusion of variables of identity within the Theory of Planned Behaviour (Ajzen, 1991). They also found support for the Theory of Planned Behaviour (Ajzen, 1991), as a reliable predictor of intentions and behaviour. Armitage and Conner (2010) highlighted the need for further research on the relationships between the factors of attitudes, perceived behavioural control, and their underlying beliefs. Webb and Sheeran (2006) reviewed 47 experiments that used the Theory of Planned Behaviour (Ajzen, 1991) to predict behaviour overall and found a medium-to-large change in intentions, which translated to a small-to-medium change in actual behaviour. These findings are typical of studies where behaviour change is examined (Abraham, 2015).

The theory also predicts prosocial behaviour (Davis et al., 2002), health behaviour (Godin & Kok, 1996), and antisocial behaviour (Beck & Ajzen, 2011; Conner & McMillan, 1999; Fishbein et al., 2002; Kiriakidis, 2008; Lucidi et al., 2008; Norman, 2011; Parker et al., 1995; Tolman et al., 1996). For prosocial behaviours, Davis et al. (2002) found that the factors of attitudes, subjective norms, and perceived behavioural control predicted the intentions of children to stay in school ($r=0.71$, $p < .01$). Health behaviours were examined by Godin and Kok (1996) in their meta-analysis ($k=58$) and they found that the theory predicted behavioural intention ($R^2 = .41$) and behaviour ($R^2 = .34$). It was also found that perceived behavioural control

and attitude explained the variance in intention, and the theory predicted intention well with perceived behavioural control as strong a predictor of attitude across health-related behaviours (Godin & Kok, 1996). As a result of their meta-analytic study, Godin and Kok (1996) concluded that the efficacy with which the theory predicted behaviour across health behaviours depended on how well intention and perceived behavioural control predict behaviour, as well as how important the attitude towards the behaviour is.

In addition to the empirical support for the theory's ability to predict prosocial and health behaviours, the theory has also been found to predict antisocial behaviour, which is described in detail in the following section.

1.1.8.1 Empirical Support for the Theory of Planned Behaviour and Ability to Predict Antisocial Behaviour.

The Theory of Planned Behaviour has been used to investigate a wide variety of antisocial behaviours and has been found to be useful in predicting the enactment of antisocial behaviours such as: men's intention to abuse women (Tolman at al.,1996); cheating on a test, shoplifting, and lying to get out of assignments (Beck & Ajzen,1991); cheating justifications and academic misconduct (Stone at el., 2009); substance use and abuse (Conner & McMillan, 1999; Fishbein et al., 2002; Lucidi et al., 2008; Orbell et al., 2001); intention to use marijuana (e.g., Ajzen et al., 1982); smoking cigarettes (e.g., Godin et al.,1992); consuming alcohol (e.g., Morojele & Stephenson, 1994; Schlegel et al., 1992); intention to commit driving and traffic offences (Parker et al., 1995), and intentions to reoffend (Kiriakidis, 2008). The research examining drug use and abuse, traffic offences, and intentions to reoffend is reviewed in detail below because these studies are most closely related to the current study.

Conner and McMillan (1999) investigated the intention to use cannabis and found a high correlation between attitudes towards cannabis use and intention to use ($r = 0.70$), a medium correlation between subjective norms about cannabis use and intention to use ($r = 0.55$), and a high correlation with perceived behavioural control and intention to use ($r = 0.69$). McMillan and Conner (2003) investigated the Theory of Planned Behaviour (Ajzen, 1991), with illicit drug use, specifically LSD, amphetamine, cannabis, and ecstasy use over 6 months. The Theory of Planned Behaviour (Ajzen, 1991), successfully predicted the behaviour, and more specifically, the variation in attitudes towards the use of the specific drugs moderated the impact of the strength of the relationship between attitudes and intentions to use LSD and ecstasy. Conner and

McMillan (1999) studied the intention to use cannabis. For the attitudes towards cannabis use, the correlation was 0.70 with behavioural intention, while subjective norms about cannabis use had a correlation of 0.55 with behavioural intention, and perceived behavioural control had a correlation of 0.69 with behavioural intention. The overall regression coefficient was 0.81. Conner and McMillan (1999) were able to use the Theory of Planned Behaviour (Ajzen, 1991) to predict antisocial behaviour.

Also, drug use has been found to moderate the strength of perceived behavioural control for intention to use LSD, amphetamine, cannabis, and ecstasy. Conner and McMillan (1999) found that the Theory of Planned Behaviour (Ajzen, 1991), had an R^2 of 0.49 for intentions to use illicit drugs and an R^2 of 0.45 for illicit drug use. They also found that the variation in the attitudes moderated the impact of attitudes on the intentions to use LSD and ecstasy. It was also found that attitude moderated the impact of perceived behavioural control on intentions to use LSD, amphetamine, cannabis, and ecstasy. McMillan and Conner (2003) concluded that the Theory of Planned Behaviour (Ajzen, 1991), can therefore be used to predict antisocial behaviour, specifically, LSD, amphetamine, cannabis, and ecstasy use. McMillan and Conner (2003) also argued that these moderating effects show how the factors in the theory can moderate behavioural intention.

In terms of the enactment of traffic offences, Parker et al. (1995) found that behavioural intention was reasonably predicted by the three factors of subjective norms, attitude, and perceived behavioural control, while their additional variables of anticipated regret and moral norms increased prediction. Specifically, perceived behavioural control allowed for an increase in the explained variance of 6.3% for cutting others off, 8.3% for reckless weaving, and 2.99% for overtaking on the inside. The addition of personal norms was found to be even more important in terms of explained variance (10.57%, 10.05%, and 15.28% for subjective norms, attitudes and perceived behavioural controls, respectively) than the three constructs in the Theory of Planned Behaviour. Therefore, Parker et al. (1995) concluded that these personal norms are a reflection of internalized moral rules, thereby suggesting that personal norms are reflective of group norms. This suggestion lends itself to the proposition that group norms are the individual's subjective norms when making decisions about antisocial behaviours. Perceived behavioural control increased the explained variance for cutting others off, reckless weaving, and overtaking on the inside. Supporting Parker et al's. (1995) suggestion that subjective norms are the group

norms, McCabe et al. (2002) noted in their study that students' perceptions that their peers cheat, and that cheating is, therefore, a normed or socially accepted behaviour, was the best predictor of cheating.

The third antisocial behaviour to be reviewed in detail is intentions to re-offend. Kiriakidis (2008) found intention to re-offend was predicted by the factors of perceived behavioural control and attitudes. The decision to continue offending rested heavily on what was described as the perception of one's own efficacy in being able to control possible criminogenic factors in the future. Personal norms were found to be more predictive of intention to enact the behaviour than subjective norms, which Kiriakidis (2008) suggested showed that young offenders are more susceptible to their personal norms as opposed to the norms of the prevailing society.

Given the empirical support for the dispositional version of the theory represented in Figure 1, it is a valuable theoretical foundation for the current study. The extended version of the theory depicted in Figure 2 includes background factors that reflect group membership which suggests that more than dispositional factors are needed to explain behaviour. Stone et al. (2009) found support for adding a new factor called justifications to the theory represented in Figure 1, thereby exemplifying the value of adding factors to the theory to predict antisocial behaviours. These justifications increased the prediction of the behaviour. Beck and Ajzen (1991) noted that the understanding of antisocial behaviour and its antecedents may be more complex than understanding socially acceptable or prosocial behaviour. As a result, Beck and Ajzen (1991) suggested the addition of other factors to the theory or combining the Theory of Planned Behaviour with other theories to better explain antisocial or dishonest actions (Beck & Ajzen 1991). To understand what role the background factors, depicted in Figure 2, play in antisocial behaviour, it is necessary to understand how these factors develop. By elucidating the background factors and including them in an explanation of behaviour, we move away from a dispositional explanation of behaviour to a multifaceted explanation. These background factors in the Theory of Planned Behaviour align with Tajfel's (1979) position that social behaviour results from the interaction of the individual's psychological system with social systems. Tajfel's (1979) work led to the inception of the Social Identity Theory, which is described in the following section.

1.2 SOCIAL IDENTITY THEORY

According to Tajfel's (1979) Social Identity Theory, individuals' sense of their identity is based on their group membership; specifically, membership in social groups provides an individual with a social identity (Tajfel & Turner, 2004). Tajfel and Turner (2004) proposed that: (a) individuals strive to maintain or enhance their self-esteem thereby striving for a positive self-concept; (b) social groups, and by extension, membership in them, have value connotations that are either positive or negative, which are determined by social consensus; and (c) the value connotation of one's own group is determined by comparison to other specific groups. As a result, Tajfel and Turner (2004) proposed Social Identity Theory, which includes the following three tenets: (a) individuals work to achieve or maintain a positive social identity; (b) positive social identity results from a favourable comparison of one's own social identity to other comparable groups; and (c) when individuals' social identity from being a member of a particular group is deemed unsatisfactory, membership is terminated and membership is sought in a group that has positive social connotations. The first tenet of Social Identity Theory, therefore, includes the proposition that due to an individual's need to be a member of a group with positive social connotations it is necessary to differentiate groups via comparison. Social Identity Theory has been successful in understanding stereotyping, prejudice, and perceptions of group homogeneity (Tajfel, 1981), discrimination (Tajfel et al., 1971), and in-group bias (Oakes & Turner, 1980; Tajfel, 1969).

The second tenet pertains to social identity as a function of group membership. Hogg and Smith (2007) noted that the examination of Social Identity Theory has expanded in scope to the study of the relationship between the individual and the groups in which he/she belongs as well as intergroup behaviours. Hogg and Smith (2007) used Social Identity Theory as a framework in which attitudes are grounded in group membership. These 'group' attitudes are cognitively held and are enacted by the individual thereby resulting in behaviour. Hogg and Smith (2007) suggested that the norming of an individual's attitude is also grounded in group membership and their shared identities with other members of the same social group. Hogg (2006) noted that an individual's social identity may have little to do with group processes, but that the experience of social identity within a group can frame the development of self/personal identities and interpersonal friendships and enmities and can also coincide with some of the background factors mentioned in the Theory of Planned Behaviour (Ajzen, 1991), such as the demographic,

personal, and environmental factors. Tajfel (1979) argued that an individual likely belongs to several groups at the same time. Examples of such groups include social class, ethnic groups, racial groups, family, peers, colleagues, and friends, just to name a few. Hogg (2006) acknowledged that identities, whether social or personal, differ in their accessibility; that is, at any time only one social identity is psychologically salient, which means that one social identity is more easily accessible than the others. Because only one social identity is salient at any given time, and any social identity and corresponding attitudes result from group membership, a behaviour, therefore, results from the salient social identity, and by extension group membership. How then does a social identity become salient?

Salience occurs when specific group membership becomes engaged and becomes the operational basis for an individual's perception of others and their behaviour (Hogg & Smith, 2007). The group membership, which is also a social identity, is made salient as a result of the fit between the situation and the different social identities that an individual possesses (Hogg & Smith, 2007; Oakes, 1987). Social Identity Theory supports the possibility that behaviour is not entirely connected to an individual's personal value system or disposition, but instead to a set of group norms and attitudes based on group membership and social identity. Hogg and Smith (2007) proposed a process whereby individuals cycle through varying group memberships until a fit is found to the present situation. It is an automatic and fast process to ensure the maintenance of group membership because it is believed that by not enacting the group's values, group membership could be lost.

According to Oakes (1987), the activation of a social identity is a function of accessibility and fit, meaning that individuals will draw on easily or readily accessible social identities based on group norms and attitudes that will best fit with the situation at hand. For example, if an individual has the social identities of a graduate student at the University of Saskatchewan, sessional instructor, staff member at the University of Saskatchewan, female, and immigrant, then in a workshop for sessional instructors at the University of New Brunswick, the graduate student and sessional instructor identities could fit and become more accessible in that session, and the individual would then enact the attitudes and norms of those specific groups. However, while two identities become more accessible, only one will be activated. The one that is activated depends on the situation that is occurring. For example, when chatting with a sessional instructor who is a graduate student, the sessional instructor graduate student norms and attitudes will

become salient. However, if speaking with a sessional instructor who has not been in graduate school in over 20 years, then the norms and attitudes of a graduate student do not fit and do not direct behaviour.

In the example above, the fit has been achieved between the situation and a salient group membership with the accompanying norms and attitudes. The fact that an individual accesses a social identity that fits with the situation suggests a high level of conformity. Hogg (2006) noted that this is a process where the individual behaviour is changed to correspond with the norms of the social identity that have been activated. Also, Hogg (2006) stated that once the fit is achieved, that fit is internalized as the "context-specific in-group prototype" and becomes even more easily accessible. One consequence of belonging to a group with which an individual strongly identifies is that the individual will enact the group norms, attitude, and behaviour on behalf of the group (Terry & Hogg, 1996). This strong identification with group membership suggests that the group does not have to be physically present for fit and that the fit with the situation and the social identity is sufficient to direct behaviour. As a result, the stronger the identification with the group, the easier it is to access the corresponding social identity.

In summary, when individuals are in a given situation, they cycle through their social identities, which by extension is also group membership, until fit is achieved. Once fit is found, the norms and attitudes of the salient social identity are engaged and are displayed in behaviour. Enacting group norms and attitudes is necessary to ensure the maintenance of group membership. This maintenance of group membership extends itself to the enactment of the group's norms and attitudes even in the absence of other group members (Hogg, 2006). The salient group is therefore important because it is the situation itself that activates the social identity ensuring that behaviour is governed by the salient group norms and attitudes. The more often the fit occurs, the faster and more automatic the social identity becomes salient (Hogg, 2006).

1.2.1 Critiques and Limitations of Social Identity Theory

Korte (2007) reviewed research examining Social Identity Theory and noted that there were three main critiques: (a) defining identity inevitably includes concepts in other disciplines and areas of Psychology; (b) it is common when social psychologists discuss identity to constantly navigate back and forth between personal identity and social identity; and (c) there is a disconnect between explanation and prediction in the theory. Concerning the first critique,

identity is defined in anthropology as an artefact of culture, while in sociology identity is a set of social roles (Stets & Burke, 2000), and in social psychology, it is a set of norms (Hogg et al., 1995). The definitions are discipline-specific thereby making them slightly different, but they still refer to the same construct globally. These different definitions can limit the generalizability of findings across disciplines since the discipline-specific definitions vary slightly. The second critique regarding the navigation back and forth between personal and social identity is researcher dependent and specific to the work researchers do. For example, in the current study, it is being proposed that social identity can direct personal identity depending on the situation. This second critique is considered a limitation because it could also limit the generalizability of findings from research examining Social Identity Theory if, for example, social identity is considered the same as, or different from personal identity. However, this is debatable as a critique given that Wenger (1998) stated that the interaction between the individual and the group is the point of social identity, therefore the idea of social identity as informing personal identity is not a limitation. The third critique is not specific to Social Identity Theory but is a limitation of theories of social behaviour in general and refers to the distinction between explanation and prediction. Social Identity Theory explains past behaviour but has not been used to predict behaviour (Hogg & McGarty, 1990; Korte, 2007).

As a result of these critiques, it is important not to extend the theory beyond its scope in terms of relevance and explanatory power. Despite these critiques, there is consensus about the existence of a social identity that is influenced by social interactions (Korte, 2007). Also, Social Identity Theory has been used successfully to explain behaviour, which is reviewed in the following section.

1.2.2 Empirical Support for Social Identity Theory

There has been extensive research on Social Identity Theory (Abrams & Hogg, 1990; Abrams & Hogg, 2004; Hogg et al., 1995; Hogg et al., 1999; Tajfel, 1979, Tajfel & Turner, 2004; Terry & Hogg, 1996; Terry et al., 1999). Social Identity Theory has also been studied in conjunction with other theories, especially the Theory of Planned Behaviour (Chatzisarantis et al., 2009; Elliott et al., 2007; Fielding et al., 2011; Terry et al., 1999), as well as used to understand social identity (Guan & So, 2016). The research that has been carried out in conjunction with the Theory of Planned Behaviour resulted from the recognition that to understand and predict behaviour, it is important to consider the individual as well as the larger

groups in which the individual belongs (Hogg & Smith. 2007). A review of the studies that included both Social Identity Theory and the Theory of Planned Behaviour follows below. These specific studies illustrate the value of extending the Theory of Planned Behaviour by including social identity. Studies that combined both Social Identity Theory and the Theory of Planned Behaviour included background factors to explain behaviour, thereby acknowledging the importance of the individual's social identity to behaviour.

The first example of research that included both theories was a study by Elliott et al. (2007) where they investigated intention to speed. Elliott et al. (2007) found that the independent predictors of intention were affective attitude, self-identity, perceived group norm, group identification, and the interaction between perceived group norm and group identification, all of which are Social Identity Theory factors since they are all aspects of group membership. Elliott et al's. (2007) findings suggest that group membership is a strong predictor of intention to speed. The second example of a study that included both theories was that of Chatzisarantis et al. (2009). They examined whether social identity and a factor they developed called perceived autonomy support affected attitudes, intentions, and health behaviour. Chatzisarantis et al. (2009) found that group norms predicted attitudes towards, and participation in, physical exertion but only for participants who had strong group identification. Chatzisarantis et al. (2009) concluded that social identity constructs should be included in the Theory of Planned Behaviour. Similarly, Guan and So (2016) examined the influence of social identity on self-efficacy beliefs through perceived social support. They found that a stronger social identity with a given social group was consistent with perceived greater social support from the group, which in turn predicted higher self-efficacy for engaging in a health-related behaviour advocated by the social group. Finally, Fielding et al. (2011) investigated factors that influence engagement in sustainable agricultural practice and they found that support for group norms and intergroup perceptions were significant predictors of intention. Additionally, they found that intentions significantly predicted self-reported behaviour. These studies all show the importance of social identity and by extension group norms to explaining and predicting behaviour.

As stated above, individuals belong to several groups at a time, making it possible for individuals to hold membership in some groups that possess prosocial attitudes and norms as well as in groups that possess antisocial attitudes and norms. As a result, it is possible that individuals can enact both prosocial and antisocial behaviour, which was the key question that

was explored in the current study. However, the question is in direct contravention to Festinger's (1957) Cognitive Dissonance Theory, which is reviewed below in the next section.

1.3 COGNITIVE DISSONANCE THEORY AND TECHNIQUES OF NEUTRALIZATION

1.3.1 Cognitive Dissonance Theory

As described above, individuals belong to several groups at a time, making it possible for individuals to hold membership in some groups that possess prosocial attitudes as well as in other groups that possess antisocial attitudes. As a result, individuals would be able to enact both prosocial and antisocial behaviour. However, this should not be possible according to Festinger's (1957) cognitive dissonance theory in which he proposed that when individuals act in ways that are incongruent with their attitudes, they experience psychological discomfort called cognitive dissonance. If an individual acts both antisocially and prosocially, then the resulting dissonance would have to be resolved.

According to Festinger (1957), dissonance will probably occur within individuals who do not have a positive attitude toward an act, but they either intend to commit the act or actually do commit the act. For example, an individual who has a negative attitude towards robbery will have cognitive dissonance contemplating or enacting a robbery as a result of attitude-behaviour inconsistency. Festinger (1957) based his work on that of Heider (1944, 1958) and noted that there is an inconsistency between two beliefs when holding one of the beliefs conflicts with holding the other belief (Ajzen, 2005). This inconsistency allows for the development of cognitive dissonance which is psychologically uncomfortable and pushes the individual to resolve the dissonance (Festinger, 1957). The dissonance can result from inconsistency between different cognitions or inconsistency between cognition and behaviour.

According to McGuire (1960), individuals can recognize logical inconsistencies and can resolve them, usually by changing an attitude or a belief. Festinger (1957) noted that there were three possible ways to reduce dissonance: (a) changing a value, attitude, or opinion; (b) changing the behaviour itself; or (c) adding cognitions consistent with the behaviour or reducing the importance of the elements of the dissonance. The ability to recognize these logical inconsistencies, according to McGuire (1960), occurs without any external pressures. This concept of consistency of cognition and behaviour is reflected in the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and the Theory of Planned Behaviour (Ajzen, 1985). For individuals to have social identities that have opposing attitudes, for example,

antisocial and prosocial attitudes, there has to be a mechanism by which the resulting cognitive dissonance is resolved. Techniques of Neutralization (Sykes & Matza, 1957) are mechanisms through which dissonance can be resolved and these techniques are described in the following section.

1.3.2 Techniques of Neutralization

Sykes and Matza (1957) proposed a theory of juvenile delinquency to oppose Cohen's (1955) claim that there are several deep and abiding inherent differences between young offenders and non-offending youth (Minor, 1981). According to the Techniques of Neutralization, antisocial behaviour tends to be based on defences for crimes (Sykes & Matza, 1957). These defences exist in the form of justifications for antisocial behaviour that are seen as valid by the individual performing the act, but not by the legal system or society. Therefore, according to the theory, the only difference between young offenders and non-offending youth is the use of these techniques of neutralization to defend the behaviour (Sykes & Matza, 1957).

Techniques of neutralization include explanations as to how an individual can resolve or prevent possible cognitive dissonance that may result from thinking of or acting in a way that is in opposition to one of an individual's many social groups, and therefore, norms. These justifications occur to protect the individual from the possible resulting dissonance, thereby preventing psychological harm. It has been found that cognitive dissonance creates motivation for the resolution of the dissonance, otherwise described as a move from dissonance to consonance (Festinger, 1957; Hall, 1998).

The specific techniques of neutralization proposed by Sykes and Matza (1957) include: (a) Denial of Responsibility; (b) Denial of Injury; (c) Denial of Victim; (d) Condemnation of the Condemner; and (e) Appeal to Higher Loyalties. Additional techniques proposed by Minor (1981) include Defense of Necessity and Metaphor of the Ledger. More recently, there have been five new techniques posited: (a) Denial of the Necessity of the Law (Coleman, 2002); (b) Claim of Normality (Coleman, 2002); (c) Claim of Entitlement (Coleman, 2002); (d) Justification by Comparison (Cromwell & Thurman, 2003); and (e) Postponement (Cromwell & Thurman, 2003). The current study focused on the five original mechanisms proposed by Sykes and Matza (1957) because drift between prosocial and antisocial behaviours was proposed and expected with these techniques (Maruna & Copes, 2017). *Drift* is defined by Matza (1964) as the ability for an individual to move between acting antisocially and prosocially. Also, the later techniques

were found when investigating specific offenders and offender types (Maruna & Copes, 2017) and the current study did not focus on offenders. A review of the specific techniques pertinent to the current study, as well as how techniques of neutralization have been measured, is described below.

1.3.2.1 Denial of Responsibility.

Denial of Responsibility (Sykes & Matza, 1957) refers to the view of the self as lacking responsibility for the antisocial actions. As a result of this view, there is a reduction in the value of the judgement of others in disapproving of the behaviour, effectively decreasing the effectiveness of others' disapproval as a deterrent to the behaviour. The explanation of how the behaviour is not the responsibility of the actor can include the attribution of responsibility to others, or the situation, or other factors external to the individual such as a traumatizing childhood, friends who led them astray, or growing up in a poverty-stricken neighbourhood (Sykes & Matza, 1957). Sykes and Matza (1957) were explicit that the concern here is not one of whether or not the behaviour was right or wrong, but rather the concern is to understand deflection of blame or guilt when violating larger social norms and values. In this view, the individual is acted upon rather than doing the acting.

1.3.2.2 Denial of Injury.

In denial of injury, the wrongfulness of the behaviour is judged based on whether there is any true injury to others (Sykes & Matza, 1957). For example, robbing a bank injures no one because the money is insured, and the bank clients will not lose out on their investments. Also, those using this technique would believe that the bank is a corrupt, money-grubbing organization. Effectively, the consequences of the behaviour do not affect anyone innocent and the only issue is that it is counter to the laws of the land, but no one is harmed.

1.3.2.3 Denial of Victim.

The denial of a victim technique is closely related to the denial of injury and suggests that due to the circumstances of the behaviour, the behaviour itself is not wrong since there is no victim (Sykes & Matza, 1957). That is, the antisocial behaviour is "rightful retaliation or punishment…the delinquent moves into the position of avenger and the victim is transformed into a wrong-doer" (Sykes & Matza, 1957; p. 668). Effectively, a victim does not exist.

1.3.2.4 The Condemnation of the Condemner.

With the condemnation of the condemner technique, the individual shifts the focus of the issue from his or her own behaviour to the behaviour of the individuals who disapprove of the antisocial behaviour (Sykes & Matza, 1957). The condemners are stated to be "hypocrites, deviants in disguise or impelled by personal spite" (Sykes & Matza, 1957; p. 688). Therefore, persons in positions of authority such as police, teacher, and parents, are viewed negatively. For example, the person would argue that police are sanctioned criminals upholding a corrupt system, so their condemnation is superfluous.

1.3.2.5 Appeal to Higher Loyalties.

With the technique of appealing to higher loyalties, if the demands of the larger society and the salient in-group are in direct contravention, the demands of the larger society are sacrificed (Sykes & Matza, 1957). With this technique, it is important to note that the individuals do not reject the dominant normative system but instead choose not to acquiesce or conform to it at all times (Sykes & Matza, 1957). The important aspect of this technique is that antisocial behaviour is not a function of the rejection of those norms, but rather loyalty to a norm that is valued as higher (Sykes & Matza, 1957). For example, a student may cheat on an exam, but believes it is wrong to be dishonest. While sitting in the exam room, or planning to cheat, the value around honesty has not changed, but in this situation, the higher loyalty is to the group norm to pass the exam.

Minor (1981) reviewed Sykes and Matza's (1957) Techniques of Neutralization and stated that the techniques apply to youth who are fundamentally more prosocial than to those who are antisocial, emerging or sporadically antisocial rather than persistently antisocial, and are more applicable to minor rather than serious offences. According to Minor's (1981) position, the techniques would not apply to chronic antisocial behaviour. Researchers suggest that initially, the individual who acts in an antisocial way may employ neutralization techniques, but that once the antisocial behaviour becomes the individual's norm, there is no clear point at which the techniques of neutralization are employed; that is, the neutralization process has become automatic (Ball, 1966; Hindelang, 1974; Minor, 1981; Schwendinger & Schwendinger, 1967). The normalization of the antisocial behaviours, thereby making them automatic, is a position that is consistently made and is a logical one when the subcultural theory of deviant behaviour is endorsed. The subcultural theory explains group activity but does not explain the individual

within the group (Fischer, 1995). Minor's (1981) theoretical review does not seek to address these shortcomings of subcultural theory.

1.3.3 The Measurement of Neutralization

Ball's (1973a) instrument, Neutralization Scale, consisting of 108 items, assesses the extent to which neutralizations or justifications for criminal behaviour are used by the participant (Yessine & Kroner, 2004). The Neutralization Scale (Ball, 1973a) has acceptable psychometric properties. Ball (1973b) found that institutionalized delinquents endorsed more neutralizations than high school students, and Ball and Lilly (1971) noted a significant relationship between neutralization scores and self-reported delinquency. Ball's (1973a) Neutralization scale was administered by Shields and Whitehall (1994) and found that the scale was too long and too verbally sophisticated for youth. As a result, Shields and Whitehall (1994) amended Ball's (1973a) measure to address these limitations. Shields and Whitehall's (1994) new neutralization scale consisted of four short scenarios that described a crime and five questions asking whether the individual in the scenario was justified in the acts by using the various neutralizations. With Shields and Whitehall's (1994) scale, neutralization is scored as occurring or not occurring. The total score for the scale is the sum of the responses to the five questions across the four scenarios resulting in a total of 20 possible points.

Atkinson's (1998) version of Ball's (1973a) Neutralization Scale, which was named the Neutralization Measure, measures only illegal behaviour. Atkinson's (1998) scale requires participants to read eight crime scenarios and assign a criminal sentence they deem fitting for the crime described in the scenario (Yessine, 2004). Participants are then asked to assign a new sentence for each of the new circumstances surrounding the crime and its enactment, which includes seven neutralizations and one validity check. Once the initial sentence is provided, the respondents are then asked to provide a sentence they think would be fair given the additional statement explaining the behaviour. The scores are computed in two ways (Atkinson, 1998). The first method is to assign a value of '1' when a decrease in the sentence is recommended by the participant, to signify a neutralization occurred, while an increase in the sentence is assigned a value of 0 which indicates no neutralization. This allows for a quick way to detect whether neutralization occurred. The second scoring method involves representing each new sentence as a fraction of the original sentence which means the score ranges from 0 to 1, where 0 represents the highest neutralization possible and 1 represents no neutralization. The first scoring method

allows for a calculation of the number of neutralizations while the second scoring method provides a magnitude of neutralization. Yessine and Kroner (2004) noted that Shields and Whitehall's (1994) scale "demonstrated that the instrument was reliable and valid, and sensitive to differences between delinquents and nondelinquents" (p. 6). Furthermore, Shields and Whitehall's (1994) scale was found to have "superior psychometric properties" (Yessine & Kroner, 2004) when Atkinson (1998) conducted research using the Shields and Whitehall (1994) version with adult offenders. Specifically, Yessine and Kroner (2004) found Shields and Whitehall's (1994) to have high internal reliability with both the frequency and magnitude calculations.

1.4 CURRENT STUDY

According to the dispositional explanation of human behaviour (Ajzen, 1987), behavioural consistency exists because the behaviour is a function of the individual and not the situation. As a result, there should be consistent behaviour as long as the behaviour is a function of the same underlying disposition. Therefore, a lack of consistent dispositional behaviour indicates a lack of the "existence of stable traits or attitudes" (Ajzen, 2005 p.31). There is little behavioural consistency seen in humans (Ajzen, 1991), which can be attributed to the possibility that behaviour is not a function solely of disposition. An additional explanation might be that behaviour results from situational specificity. Situational specificity refers to the aspects of the situation that people attend to when deciding to enact a behaviour.

There is a good deal of evidence for behavioural inconsistency connected to the same disposition (Hartshorne & May, 1928; Hartshorne et al., 1929; Hartshorne et al., 1930; LaPiere, 1934). Someone can act dishonestly and cheat on an exam but would not tell a lie outside of the class. The disposition is still honesty/dishonesty and the individual believes it is wrong to be dishonest, but in one situation the person will act consistently with the norm but in another situation will act inconsistently with that norm. Staub (1974) and Schwartz (1977) noted that situational characteristics could trigger specific dispositional tendencies, and it is only when they are triggered that these dispositional consistent behaviours occur.

Antisocial behaviour has been studied as a function of disposition (Ajzen, 1987; Andrews et al., 1990). From the dispositional perspective, previous antisocial behaviour is considered a predictor of future antisocial behaviour and efforts to quell subsequent antisocial behaviour rely on the concept of shifting dispositions. However, it is argued that the origin of the behaviour is

not simply dispositional but is a significantly more complex process. Wallston and Wallston (1981) asserted that "human behaviour is complex and multi-determined" (p.236) and believing that any dispositional attitudinal beliefs will predict all behaviour is unrealistic. However, Ouellette and Wood (1998) found in a meta-analysis that past behaviour does indeed predict future behaviour and showed that behaviour has a "highly significant index of heterogeneity" (cited in Ajzen, 2005, p.91), suggesting that past behaviour has a relationship with future behaviour but does not explain it in its entirety. Consequently, other possible explanations should be investigated. It is commonly held that personality traits can be extrapolated based on specific behaviour (e.g., if a person finds some money on the ground and returns it to the owner, then the trait of honesty is assigned to the individual), which can be fallacious. A trait is not simply a function of one act demonstrating that trait and it does not mean that in another situation that requires the same trait, that the same individual would indeed act in the same way.

In the current study, a more complex explanatory model of antisocial behaviour was proposed (Figure 3), which included combining the previously discussed theories: (a) Theory of Planned Behaviour; (b) Social Identity Theory; and (c) Cognitive Dissonance and the Techniques of Neutralization. It was noted by Ajzen and Fishbein (1980) that the Theory of Planned Behaviour is open to the inclusion of additional predictor variables thereby making possible the combination of the theories. Recall that the Theory of Planned Behaviour explains and predicts behaviour through four factors: (a) subjective norms; (b) attitude towards the behaviour; (c) perceived behavioural control; and (d) behavioural intention. In the current study, it was proposed that behavioural intention and behaviour may be mediated by techniques of neutralization to result in the enactment of both antisocial and prosocial behaviours without the resultant cognitive dissonance. The background factors included in the Theory of Planned Behaviour are proposed to develop as a function of group norms, which are essential for the social identity of the individual. According to Social Identity Theory (Hogg, 2006), the background factors refer to social groups and their norms.

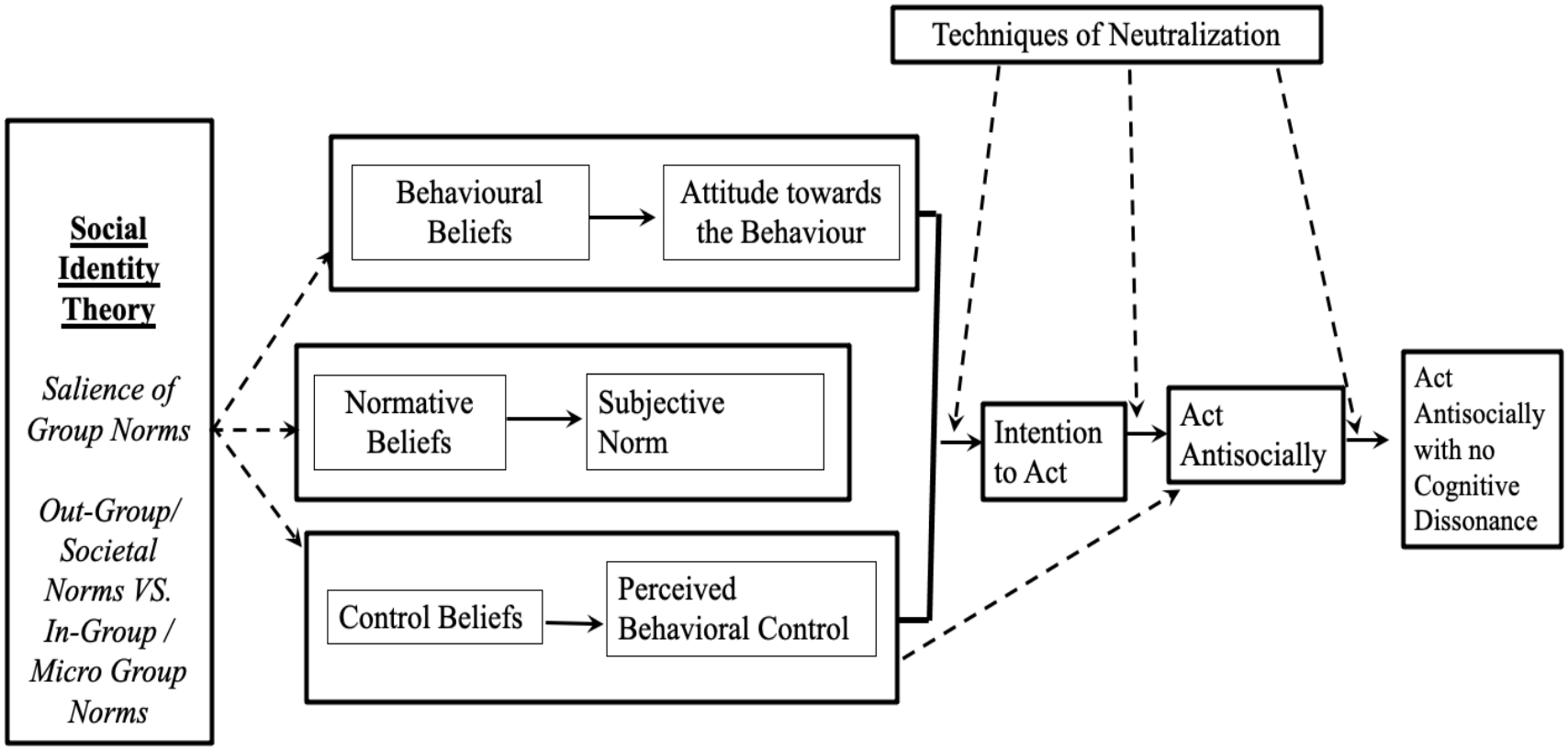
When a person acts in a way that is consistent with the norms of one social group but inconsistent with the norms of another social group, cognitive dissonance results. This cognitive dissonance must be resolved, and Techniques of Neutralization would allow for this resolution. Techniques of Neutralization allow individuals to resolve the dissonance and remain a member of groups that have opposing or differing social norms. An individual employing neutralization

would have no cognitive dissonance while allowing him or her to take part in the intended behaviour. In short, the situation will make a group membership salient as well as the set of norms that would be considered in enacting a behaviour. To enact the behaviour while holding other opposing group memberships and norms, a technique of neutralization is needed so that the antisocial behaviour is enacted without cognitive dissonance.

To investigate the theoretical model described in Figure 3, different behaviours were compared based on the two features of legality and norming to the friend social group of respondents. In phase I, six behaviours were investigated, two in each of the three categories of legal and normed, illegal and normed, and illegal and not normed. In phase II, three of six behaviours were investigated based on the findings from phase I. In addition, phase I was used to determine how the variables, valued group and behavioural type were operationalized in phase II. The research questions for both phases of the current study are described below.

Figure 1.3

Theoretical Model of the Current Study



1.5 RESEARCH QUESTIONS

The overall goal of the current study was to use the main tenets of Theory of Planned Behaviour (Ajzen, 1991), Social Identity Theory (Hogg & Smith, 2007), Cognitive Dissonance (Festinger, 1957), and Techniques of Neutralization (Sykes & Matza, 1957) to examine a multifaceted explanation of antisocial behaviour. To do so, a two-phase study was conducted. Phase I was an elicitation study that investigated the three factors of attitudes, perceived behavioural control, and subjective norms that are included in the Theory of Planned Behaviour (Ajzen, 2006; Skrzypiec, 2017) with six behaviours, which were: (a) consensual sexting; (b) photographing or recording people in public; (c) texting while driving; (d) illicit drug use; (e) physical assault; and (f) breaking and entering. These behaviours were chosen based on the characteristics of legality and norming, that is, legal and normed, illegal and normed, and illegal and not normed. Elicitation studies (Ajzen, 1991; Ajzen, 2005; Skrzypiec, 2017) are a common aspect of research examining Theory of Planned Behaviour and are required to determine the behaviours that are to be investigated in the second phase of the study, specifically, to understand the specific antecedents to enact a behaviour according to the Theory of Planned Behaviour. The research question of phase I of the current study was:

1. How do young adults rate and describe the specific behaviours based on the factors of attitudes, subjective norms, perceived behavioural control, valued groups who would endorse or not the behaviours as well as those who would enact the specific behaviours of consensual sexting, recording persons in public, illicit drug use, texting while driving, physical assault, and breaking and entering?

The second phase was informed by the findings in phase I. From the six behaviours included in phase I, three were chosen to be tested in phase II. If an individual can possess both antisocial and prosocial value systems, it could mean that the individual is psychologically protected from the consequences of the behaviour and may therefore be able to repeat acting antisocially, with no unresolved dissonance. Thus, the goal of the second phase of the study was to test the proposed model depicted in Figure 3. Phase II, therefore, included the additional instruments of the Criminal Sentiments Scale (Andrews & Wormith, 1984) and the Measure of Criminal Attitudes and Associates (Mills & Kroner, 1999) to investigate the research questions in phase II which were:

2. Are antisocial behaviours enacted as a result of situational factors, specifically how normed the behaviour is to a valued social group?
3. Can individuals possess both antisocial and prosocial value systems that are enacted based on situational factors, that is, will the data produce a structural equation model that has a good fit for legal and normed, illegal and normed, and illegal and not normed behaviours?

CHAPTER 2: ELICITATION STUDY

INTRODUCTION

The Elicitation Study is a necessary first step when doing research with the Theory of Planned Behaviour (Ajzen, 1991) because it investigates the factors of the Theory of Planned Behaviour associated with the specific behaviour of interest with the specific population of interest. For the current study, it was necessary to determine, from the population of interest, the theory's factors of attitudes, subjective norms, and perceived behavioural control for the six behaviours. In addition, it was necessary to determine whether the chosen behaviours fit into the categories of normed and legal, normed and illegal, and not normed and illegal. Therefore, the main purpose of this phase was to understand the specific antecedents for enacting a behaviour according to the Theory of Planned Behaviour and the value of the normative referents according to Social Identity Theory. The antecedents of the behaviour and the value of the normative referent groups were used to develop the scenarios to be tested in the second phase.

The research question for this first phase of the study was:

1. How do young adults rate and describe behaviours based on the factors of attitudes, subjective norms, perceived behavioural control, valued groups who would or would not endorse the behaviours and those who would enact the specific behaviours?

The behaviours investigated in this study were:

1. Legal and normed: consensual distribution of intimate pictures (sexting) in an intimate relationship (CS);
2. Legal and normed: video recording or photographing someone in public (record);
3. Illegal and normed: illicit drug use (IDU);
4. Illegal and normed: texting while driving (TWD);
5. Illegal and not normed: breaking and entering (B&E); and
6. Illegal and not normed: physical assault (PA).

The behaviours were determined by the student-researcher's experience with the target population while teaching a course on criminal behaviour for eight years and learning about the

normed behaviours for this group. The behaviours were chosen for the normed category based on experience with the population. *Normed* in this context means the behaviours that are acceptable to the social group of the respondents (Elsenbroich & Xenitidou, 2012). The legality of the behaviours was determined based on the Criminal Code of Canada. The attitude towards the behaviour was assessed by asking about the advantages and disadvantages of the behaviour. Subjective norms for each of the behaviours were assessed with questions about which valued group would enact and not enact the behaviours and about which valued groups would support or decry their enactment of these behaviours. Perceived behavioural control was assessed by asking what the enabling and preventative factors for the behaviour were, which is a function of group membership.

Therefore, this first phase was designed to determine the attitudes, normative referent groups, and their value to the participants, as well as the perceived behavioural control related to the legal and normed, illegal and normed, and illegal and not normed behaviours. An exploratory sequential design was chosen for this study because it was important to understand the specific variables regarding the six behaviours according to the Theory of Planned Behaviour and Social Identity Theory.

2.0 METHODOLOGY

2.1 PARTICIPANTS

The participants were a convenience sample of undergraduate Psychology students enrolled at the University of Saskatchewan in the academic year 2018 - 2019. The inclusion criteria for participation in the study were that participants had to be at least 18 years of age at the time of participation and a student or staff member at the University of Saskatchewan. Recruitment occurred through the Personalized Access to Web Services (PAWS) as well as through the Psychology participant pool. Students who participated through the Psychology participant pool were awarded two credits for completion of this study (one for each thirty-minute increment it took to complete the study).

The intended sample size for this study was between 30 and 50, however, due to a lack of studies available in the Psychology Participant pool at the time of data collection, the study was assigned more hours than needed which resulted in a large sample size of 97, 79 of whom accessed the survey through the Psychology participant pool. Given that the study is phase I of a two-phase study to understand the attitudes, subjective beliefs, perceived behavioural control,

and valued groups for the sample for the target behaviours, it was useful to have a much larger than the needed sample size.

2.2 MEASURES

2.2.1 Demographics Questionnaire

The Demographics Questionnaire included questions about age, sex, gender, race, ethnicity, and marital status. All the questions were open-ended to allow participants to self-identify as opposed to asking participants to place themselves into a preconceived category.

2.2.2 Elicitation Study Questionnaire

The elicitation study questionnaire was developed from one posited by Ajzen (2006) and used by Williamson (2013). The questions are open-ended, and the questionnaire is made up of three sections that represent the three Theory of Planned Behaviour factors: behavioural outcomes, normative referents, and perceived behavioural control. More specifically, the participants' attitude towards the behaviour is measured by asking three questions about the advantages and disadvantages of the behaviour. Subjective norms are measured with three questions about which groups would approve and disapprove of the behaviour as which group would enact or not the behaviour and the value of the group to the respondent. Perceived behavioural control is measured with three questions that ask about enabling and preventative factors.

The Elicitation Study questionnaire includes three types of behaviours: i) legal and normed behaviours; ii) illegal and normed behaviours; and iii) illegal and not normed behaviours. Two behaviours for each type are included for a total of six behaviours. To protect participants from the repercussions of possibly reporting illegal acts, the original questions used by Ajzen (1991) were modified to: (a) remove the first person; specifically, participants are asked about their behaviour or others' behaviours; (b) indicate the groups instead of the individual who would or would not enact the behaviour; (c) indicate the groups who would approve or disapprove of the behaviour; and (d) indicate the value of each of the groups to the respondent.

The three behavioural outcomes questions inquire about the advantages and disadvantages of the behaviour and what else comes to mind when the participant thinks about the behaviour in question. In terms of the normative referents questions, participants are asked about the groups who would approve and disapprove of enacting the behaviours as well as those who would, and would not, enact the behaviour as well as the value of each of the groups to the

participant. Group options include: (a) parents; (b) siblings; (c) cousins; (d) extended parental family; (e) friends; (f) social recreational friends; (g) acquaintances; and (h) colleagues. Participants are asked to indicate the value of the group from no value to highly valuable. The participants are then asked what factors would enable and prevent a person from carrying out the act in question. The Informed Consent and the Elicitation Study Questionnaire can be seen in Appendix A and B, respectively.

2.3 RESEARCH DESIGN

This study constituted the qualitative phase of an exploratory sequential design. The exploratory sequential design is a two-phase sequential design in which the first phase is a qualitative exploration of a topic to develop the questions, or in this case, scenarios, to be used in the second quantitative phase (Creswell & Plano Clark, 2011). The purpose of the design is to generate findings from a smaller initial sample to inform a subsequent phase of research with a larger sample (Creswell & Plano Clark, 2011; Greene et al., 1989).

2.4 PROCEDURE

The Elicitation Study Questionnaire was hosted on SurveyMonkey as an online survey and was advertised on PAWS as well as placed in the SONA Psychology participant pool at the University of Saskatchewan. Once participants went to the SurveyMonkey link, they were presented with the Informed Consent form (Appendix A) and once they gave their consent to participate, they received access to the survey (Appendix B). There were no required responses to any of the survey questions. Once the participants completed the survey, the data were submitted and stored on SurveyMonkey. The survey took on average 45 minutes to complete and participants who were from the Psychology Participant pool were awarded two credits for their participation. Credit is given to all students who participate in the studies that are made available in the participant pool and that credit is assigned by the coordinator which has no relationship to the studies within the pool. There was no other compensation offered for participation.

2.5 RESULTS

2.5.1 Data Cleaning

A total of 157 respondents submitted the survey; 82 of the respondents were from the Psychology participant pool and the remaining 75 were elicited through the PAWS announcement. The data were filtered for complete questionnaires, which resulted in 97 complete responses. Incomplete questionnaires were removed to decrease the overrepresentation

of responses to some questions and underrepresentation of responses to other questions, thereby unduly influencing the themes (Singh & Richards, 2003). Of the 97 completed questionnaires, 79 respondents were recruited through the Psychology participant pool and the remaining 18 accessed through PAWS.

2.5.2 Demographic Data

The open-ended demographic data were exported to SPSS 25. The data were then coded from open-ended responses to quantitative categories based on the reported data. Once recoded, the frequencies for all demographic variables were completed.

2.5.3 Behavioural Data

According to Creswell and Plano Clark (2011), in an exploratory sequential design where the intent is to develop variables to be tested in a second phase, it is recommended that a typical qualitative analysis be conducted. With this type of analysis, Creswell and Plano Clark (2011) recommend the identification of useful quotes or comments. The data were analyzed using thematic analysis, which involves the themes arising through the interaction of the researcher with the data (Wertz et al., 2011). To assess the key factors described in the Theory of Planned Behaviour and Social Identity Theory, it was best to complete a deductive thematic analysis (Braun & Clarke, 2006) because this method looks for themes within the data. The themes that were found for each of the questions for each of the behaviours were used to determine the behaviours to be investigated in the second phase. The themes were also used to determine the variables to be manipulated in the scenarios. Finally, the themes were used to determine the factors in the Theory of Planned Behaviour for the behaviours and therefore the specific attitudes, subjective norms, perceived behavioural control and valued groups in the scenarios.

The data analysis was completed by following the phases of thematic analysis suggested by Braun and Clarke (2006). There was no need to transcribe the data as it was collected online. The data were downloaded, saved, and exported to NVIVO 12.4. The data were then read and organized in NVIVO first by the type of behaviour (the six behaviours) and then by each of the nine questions, which assessed attitudes, subjective norms, valued group, and perceived behavioural control. The researcher engaged with the data over several months and generated initial themes for each question for each behaviour by moving sections of responses into what NVIVO calls *nodes*. Each node represented a theme. For example, with the question that asked for the advantage of enacting the behaviour, all the responses were collated and reviewed and

then coded into nodes. Each node contained several responses and represented a theme. Once the initial coding was done, the nodes and the responses they contained were reviewed for fit with the node as well as for repeated nodes or missing nodes. This was completed with all nine questions for each of the six behaviours. Following the initial coding, the themes, and all their corresponding quotes, were reviewed to determine whether responses were coded into the most appropriate themes or whether they should be moved to another theme. The themes were also checked to verify whether they could be combined into new themes. The themes were again reviewed for how well they reflected answers to the initial questions, for example, determining whether the themes are reflective of the advantages of enacting the behaviour. Finally, a codebook, which included all the themes and the corresponding quotes, was generated from NVIVO and displayed the frequencies of each of the themes. These frequencies reflect the number of quotes within a theme, that is, how often the theme was provided as a response to the question. As a result, the higher the frequency of the theme for a given response to a question, the more often that response was provided by participants.

Once the codebook was reviewed, the themes for each question were compared across behaviours, but within the type of behaviour, that is, legal and normed, illegal and normed, and illegal and normed, to determine which one of the two behaviours for each behaviour would be investigated in the subsequent study. Four main criteria were used to determine the behaviour for each behaviour type to be used in the second phase. The first criterion was the ratio of the number of themes provided as advantages of enacting the behaviour to the number of themes provided as disadvantages of enacting the behaviour. The second criterion was the ratio of themes provided that would enable the behaviour to the themes provided that would prevent the enactment of the behaviour. The results of the first and second criteria are noted in Tables 4 and 5. The third criterion was an examination based on the groups that participants added to the groups that were already listed of who would approve or disapprove of enacting the behaviour. The fourth criterion was a comparison of the groups who would enact the behaviour to the groups who would not enact the behaviour.

In terms of the first criteria, it was assumed that a larger number of advantageous themes relative to disadvantageous themes indicated higher acceptability of the behaviour for the sample, while a lower number of advantageous themes relative to disadvantageous themes was assumed to indicate lower acceptability of the behaviour for the sample. Also, for the second

criteria, a larger number of enabling factors relative to preventative factors were assumed to indicate higher acceptability of the behaviour for the sample, whereas a lower number of enabling factors relative to preventative factors was assumed to indicate lower acceptability of the behaviour to the sample. The ideal ratio would be 1:1 as this would indicate that if a behaviour is endorsed in the second phase, it is more likely due to the manipulations in the scenarios and not to the internal evaluations of the behaviour.

The third criterion that was used to determine which of the two behaviours for each behaviour type would be investigated in the scenarios was the groups that respondents added to the provided list when reporting who would approve of, disapprove of, enact, or not enact the behaviours. More specifically, the addition of '*none'* as a group in response to which group would approve of or enact the behaviour was assumed to be an indication of lower acceptability of the behaviour to the sample, especially if the *'none'* group was found to have the highest frequency. On the other hand, the addition of *'none'* as a group in response to which group would disapprove of or not enact the behaviour would indicate higher acceptability of the behaviour. The fourth criterion used was examining how consistently these groups were mentioned in groups who would enact or not enact the behaviour. This examination was done to ensure the behaviour chosen for the behaviour type is neutral, thereby not lending it to being easily endorsed or not by respondents in phase II. Similar to the previous criterion, the intention was to use a behaviour to which the endorsement was due to the internal evaluations of the behaviour and not to other factors.

2.6 RESULTS

2.6.1 Demographic Data

Participants' ages ranged from 17 to 52 years (M=21, SD=5.9). The largest age group was between the ages of 18 and 21 with a frequency of 71. The ages for the remaining 26 participants ranged from 22 to 52 years of age. The majority of participants reported their sex as female (72.8%), their gender as female (73.4%), their marital status as single, unmarried, and dating (88.3%), their race as Caucasian (71.9%), and their ethnicity as Canadian (53.4%).

2.6.2 Behavioural Data

The themes for each behaviour were organized by question and then by the top three most frequent response to that question. The themes with the three highest frequencies for each of the nine questions are reported below in Tables 1, 2 and 3 for each of the three types of behaviour.

2.6.2.1 Legal and Normed Behaviours.

The two legal and normed behaviours were consensual sexting in an intimate relationship and recording and photographing people in public spaces. Sexting is the sharing of sexually explicit content, that is, images, videos, and text messages, using an electronic device (Mori et al., 2020). Sexting is legal for the age group in the current study. Mori et al. (2020), in their meta-analysis, noted that sexting is a common behaviour among emerging adults, which they defined as 18 to 29 years of age. This means that sexting is also a normed behaviour. The behaviour of recording people in public was chosen for similar reasons. That is, it is legal and with the ease of recording on electronic as well as the prevalence of social media it is considered normal to record people in public either intentionally or unintentionally. The themes with the three highest frequencies for each of the questions for the legal and normed behaviours of consensual sexting and recording or photographing people in public are reported in Table 1.

Table 2.1

Themes with the Three Highest Frequencies for Legal and Normed Behaviours by Behaviour and Question

Questions	Legal and Normed Behaviours	
	Consensual Sexting	Recording / Photographing
Advantages	Relationship maintenance (n=80) Better sex life (n=20) Fun, playful, dirty (n=13)	Verifying events (n=27) Entertainment (n=23) Capturing memories (n=22)
Disadvantages	Danger of distribution (n=48) Privacy concerns (n=18) Blackmail (n=13)	Invasion of privacy (n=37) No consent (n=31) Causing people to be uncomfortable (n=8)
Approve	Friends HV (n=45) SRF MV (n=15) Siblings HV & Friends MV (n=12)	Friends HV (n=39) Acquaintances LV (n=26) Siblings HV (n=22)
Disapprove	Parents HV (n=50) Siblings HV (n=15) SRF HV (n=11)	Parents HV (n=31) EPF MV (n=10) Siblings HV (n=9)
Enable	Psychosocial factors (n=30) Access to device (n=18) Long-distance relationship (n=16)	Means to record (n=24) Capturing memories (n=23) Funny videos (n=17)
Prevent	Lack of privacy (n=35) Trust (n=26) Belief systems (n=21)	Being conspicuous (n=21) No consent (n=16) Rules against it (n=11)
Enact	Friends HV (n=44) SRF MV (n=18) Friends MV (n=13)	Friends HV (n=40) Acquaintances LV (n=16) SRF MV (n=13)

Questions	Legal and Normed Behaviours	
	Consensual Sexting	Recording / Photographing
Not Enact	Parents HV (n=46) EPF LV (n=14) Siblings HV (n=12)	Parents HV (n=32) EPF MV (n=8) Siblings MV (n=8) EPF HV (n=7)
Anything Else?	Negative consequences, risky and trust (n=9) Maintenance of relationship and normed behaviour. (n=8) Ways to engage safely (n=6)	Time of high social media involvement (n=14) No consent (n=11) An expectation to be recorded in public (n=8)

HV- High Value LV- Low Value SRF- Social Recreational Friends
MV- Moderate Value EPF – Extended Parental Family

For both of the legal and normed behaviours of consensual sexting in an intimate relationship and recording or photographing people in public places, there were a large number of themes. The themes stated as the advantages for both legal and normed behaviours involved a concern with socially acceptable factors such as *maintaining relationships* as well as *verifying events* and *capturing memories*. The disadvantages for the legal and normed behaviours were similar in terms of highlighting privacy concerns. For both behaviours, the groups who approved and disapproved of the behaviours were similar. Specifically, for consensual sexting, both *social recreational friends* of *moderate value* and *siblings* of *high value* approved and disapproved of the behaviours. For recording in public, *parents* and *siblings*, both of *high value*, approved and disapproved of the behaviour. This suggests that while the behaviour may be normed to the group as a whole, the lack of legal consideration of the behaviours could account for higher approval of the behaviours because the behaviour is in fact legal.

The themes regarding approval and disapproval were similar across the behaviours, with *friends* and *siblings* both of *high value* approving of both, while *parents* and *siblings* both of *high value* disapproved of both behaviours. This suggests strongly that the behaviour is normed to the group sample but not to their parental age groups. In contrast to these findings, there was little similarity across the valued groups in terms of which groups would enact or not enact the behaviours. However, there were similar groups and values reported for not enacting the behaviours across the two behaviours; specifically, *extended parental family* and *siblings*, both of *high value*. The enabling and preventative factors were similar across the two behaviours as well. For example, having a device or access to a device to complete the behaviours was noted.

2.6.2.2 Illegal and Normed Behaviours.

The two illegal and normed behaviours included illicit drug use and texting while driving. Both behaviours are illegal. The behaviours were determined anecdotally based on the experience of the student-researcher with the target population through eight years of teaching students in that age group. Additionally, several campaigns exist to deter these and indicate that such behaviours are illegal and these campaigns are aimed at the age group in the current study. The themes with the three highest frequencies for each of the questions are reported in Table 2.

Table 2.2

Themes with the Three Highest Frequencies for Illegal and Normed Behaviours by Behaviour and Question

Questions	Illegal and Normed Behaviours	
	Illicit Drug Use	Texting While Driving
Advantages	None (n = 29) Escape reality (n = 19) Fun (n = 18)	None (n = 29) Communication (n = 23) Dealing with an emergency (n = 9)
Disadvantages	Health problems (n = 57) Addictive (n = 45) Criminal / Legal consequences (n = 40)	Increased risk of accident (n = 44) Distracted driving (n= 32) Dangerous (n= 25)
Approve	SRF MV (n = 21) Friends HV (n = 18) Acquaintances LV (n = 12)	Friends HV (n = 33) SRF MV (n = 15) Siblings HV (n = 12)
Disapprove	Parents HV (n = 59) Siblings HV (n = 27) Friends HV (n = 26)	Parents HV (n = 61) Siblings HV (n = 23) Friends HV (n = 21)
Enable	Access to drugs (n = 31) Peer pressure (n = 29) Psychosocial factors such as self-medication and environment that promotes usage and mental illness (n = 11)	Receiving a text while driving (n = 13) Stopped @ red light (n = 13) Little police presence (n = 9)
Prevent	Legal implications and consequences (n = 5) Positive psychosocial factors (n = 4) Disapproval of important others & lack of access (n = 3)	Police presence (n = 24) Passengers in vehicle (n = 12) Higher traffic (n = 11)
Enact	SRF MV (n = 17) Acquaintances LV (n = 16) Friends HV (n = 16)	Friends HV (n = 39) Friends MV (n = 17) SRF MV (n = 16)

Questions	Illegal and Normed Behaviours	
	Illicit Drug Use	Texting While Driving
Not Enact	Parents HV (n = 50) Siblings HV (n = 21) Friends HV (n = 17)	Parents HV (n = 53) Siblings HV (n = 16) EPF HV (n = 10)
Anything Else?	Justice System & Criminalization (n = 20) Addiction (n = 15) Stereotypical Junkie (n = 11)	Vehicular accidents (n = 25) Legal consequences (n = 10) Dangerous and Death (n = 9)

HV- High Value
MV- Moderate Value
LV – Low Value
SRF- Social Recreational Friends
EPF – Extended Parental Family

Across the two illegal and normed behaviours of illicit drug use and texting while driving, there were similarities in who approved and disapproved of the behaviours. In fact, for the disapproval of the behaviours, the groups were identical except for the addition of 'none' by participants with texting while driving. Also, the highest-rated advantage for both behaviours was *none*, however, there were advantages noted, which is interesting but not unexpected given that the behaviour is illegal.

In terms of groups who would or would not enact the behaviour of illicit drug use, the only constant group was *friends* of *moderate value*. For texting while driving, *siblings* of *high value* both approved and disapproved of the behaviours. Across the behaviours, *friends* of *moderate value* and *social recreational friends* of *moderate value* would enact the behaviours, while *siblings* and *parents* of *high value* would not enact the behaviour, with *parents* being the highest on both. The enabling factors across both behaviours included *access to the drugs* and the *phone* and *being involved in a conversation* as well as *being stopped at a red light*, which would decrease the chance of an accident from the perspective of the respondent. Preventative factors for both behaviours included legal concerns, which suggested an awareness of the illegality of the behaviours. The only indication that the behaviours would not be enacted by respondents was the report of the preventative factors for each of the behaviours.

The findings suggested that both behaviours in the illegal and normed type were indeed normed to the sample. Texting while driving was normed to the majority age group (between nineteen and twenty-one), which was made apparent by the responses that were given to the nine questions that attempted to ascertain behavioural outcomes, normative referents, and their value, as well as respondents' perceived behavioural control. The term *illicit drug use* was chosen specifically, as opposed to specifying a drug, because the drug of preference for the sample was

not known. Also, the laws regarding whether marijuana was legal had recently changed. Using the term *illicit drug use* did not force the consideration of a specific drug and therefore allowed respondents to identify whichever drug they considered illicit.

2.6.2.3 Illegal and Not Normed Behaviours.

The illegal and not normed behaviours that were investigated were physical assault and breaking and entering. The two behaviours are illegal but are also considered extreme and violent and as such were assumed not to be normed to the sample. The findings in terms of the three themes with the highest frequencies to all nine questions are reported in Table 3.

Table 2.3

Themes with the Three Highest Frequencies for Illegal and Not Normed Behaviours by Behaviour and Question

Questions	Illegal and Not Normed Behaviours	
	Physical Assault	Breaking and Entering
Advantages	None (n = 55) Self defense (n = 23) Asserting dominance (n = 5)	None (n = 36) Getting what you want/need (n = 19) Getting free stuff (n = 10)
Disadvantages	Illegal (n = 63) Chargeable offense (n = 19) Mental trauma believed to accompany physical assault (n = 13)	Criminal consequences (n = 44) Criminal activity (n = 34) Getting caught (n = 17)
Approve	None (n = 20) Acquaintances LV (n = 11) SRF MV (n = 9)	None (n = 32) Acquaintances LV (n = 17) Friends HV (n = 8)
Disapprove	Parents HV (n = 50) Siblings LV (n = 30) Colleagues LV (n = 11) Cousins HV (n = 11)	Parents HV (n = 57) Siblings HV (n = 30) Friends HV (n = 29)
Enable	Attacked first (n = 30) Emotional enablers (n = 19) Intoxication (n = 18) Protecting others (n = 15) Psychological characteristics of the enactor (n = 12)	Opportunity (n = 17) Desperation (n = 13) Homelessness (n = 8)
Prevent	Individual characteristics (n = 52) Law enforcement (n = 16) Consequences (n = 11)	Fear (n = 23) A security system in place (n = 20) Moral compass (n = 19)
Enact	Acquaintances LV (n = 15) SRF MV (n = 9) Siblings HV (n = 8)	Acquaintances LV (n = 18) SRF MV (n = 10) Colleagues LV (n = 8) Acquaintances NV (n = 8)

Questions	Illegal and Not Normed Behaviours	
	Physical Assault	Breaking and Entering
Not Enact	Parents HV (n = 43) Friends HV (n = 24) Siblings HV (n = 23)	Parents HV (n = 55) Siblings HV (n = 26) Friends HV (n = 20)
Anything Else?	Occurs in specific situations – gang and Intimate Partner Violence (n = 41) Negative aspects of it (n = 15) Outcomes of physical assault (n = 13)	Stealing and robbery (n = 20) Crime and criminals (n = 13) Moral compass (n = 8)

HV- High Value LV – Low Value SRF- Social Recreational Friends MV- Moderate ValueNV- No Value EPF – Extended Parental Family

Unsurprisingly, the results from the illegal and not normed behaviours show more consideration of the illegality of the behaviours, especially in the responses to the disadvantages and the preventative factors for both behaviours. *None* was the group with the highest frequency for advantages. The groups who would approve and disapprove of the behaviours were not similar across the behaviours, except for *acquaintances* of *low value* in physical assault. Across the behaviours, however, *none* and *acquaintances* of *low value* were similar across approving groups. In terms of the groups who would disapprove of the behaviours, there were four similar groups. Specifically, *parents* of *high value*, *colleagues* of *low value*, *cousins* of *high value,* and *acquaintances* of *low value* all were reported as disapproving of the behaviours.

A similar trend was noted for the groups who would both enact and not enact the behaviours as well as across the behaviours. Groups expected to enact behaviours for physical assault included *acquaintances* of *low value*, *social recreational friends* of *moderate value*, *siblings* of *high value,* and *social recreational friends* of *low value*, all of which were expected to enact breaking and entering as well. For not enacting physical assault, *parents* of *high value* and *friends* of *high value* were indicated for breaking and entering. The preventative factors were also similar across the two behaviours as the illegal component was represented in both.

Overall, the frequencies of the themes were very low for the advantages. The disadvantages of physical assault had much higher frequencies and more detailed responses than those for breaking and entering. Similar to physical assault, there was a wide range of responses, as well as more detailed responses, for the disadvantages and advantages of breaking and entering. An interesting finding with the illegal and not normed behaviours was that there were

similarities in terms of behavioural outcomes, normative referents, and perceived behavioural control.

2.7 Analyses to Determine Behaviours for Phase II

There were six behaviours investigated in phase I. Given that the behaviours were chosen through the student-researcher's experience with the target population, it was important to investigate more than one behaviour for each behavioural type in phase I to ensure there would be one behaviour that was a good example for each of the three behavioural types in phase II. A second reason for the reduction in the number of behaviours to be included in phase II was methodological. With six behaviours the length of the survey in phase II would have taken twice the time to complete. If six behaviours had been included in the second phase participants could have experienced responder fatigue, thereby decreasing the completion rate for the surveys (Porter et al., 2004).

The criteria for determining which three of the six behaviours were to be used in phase II included the ratios and the additional groups and as a result Table 4 was generated. Table 5 shows the ratios of themes reduced to the lowest ratio for a simpler review of the ratios of themes for the behaviours and questions to determine which was closest to 1/1. The information in Table 4 was used along with the additional criteria of added groups to determine which one of the pairs of behaviours across the three types would be used in phase II of the study. Specifically, the ideal behaviour would have a ratio of 1/1, or as close to this as possible, for the four pairs of questions: (a) advantages/disadvantages; (b) approve/disapprove; (c) enable/prevent; and (d) enact/not enact. The behaviour that had the closest 1/1 ratio for the four pairs of questions was chosen for phase II.

Table 4

Number of Themes for each Question for each Behaviour and Groups Added to the Groups Lists by Respondents

Questions	Behaviours					
	Legal and Normed		Illegal and Normed		Legal and Normed	
	CS	Record	IDU	TWD	PA	B&E
Advantages	25	23	26	31	25	29
Disadvantages	46	21	42	24	39	33
Approve & Additional Groups	27 & 1 additional group (family)	31 & 1 additional group (family)	24 & 2 additional groups (none & family)	23 & 2 additional groups (none & family)	21 & 2 additional groups (family & none)	21 & 2 additional groups (none &NA)
Disapprove & Additional Groups	22 & 1 additional group (family)	22 & 1 additional group (family)	25 & 1 additional group (family)	29 & 2 additional groups (none & family)	26 & 1 additional group (family)	28 & 3 additional groups (none, partner & family)
Enabling Factors	36	28	53	75	23	53
Preventative Factors	27	38	21	57	28	42
Enact & Additional Groups	24 & 2 additional groups (none & partner)	26 & 1 additional group (family)	21	28 & 3 additional groups (none, family & partner)	22	24 & 2 additional groups (I don't know & none)
Not Enact & Additional Groups	22 & 2 additional groups (church friends & family)	24 & 1 additional group (family)	25 & 1 additional group (family)	23 & 2 additional groups (none & family)	25 & 1 additional group (family)	25 & 2 additional groups (partner & family)
Anything Else?	52	35	62	49	23	53

As depicted in Table 5, for the legal and normed behaviours, the recording behaviour had better ratios across the questions with an almost 1/1 ratio for advantages and disadvantages as well as enact and not enact. While there were more preventative factors than enabling ones, the other ratios were one to one, which suggests that it is the better of the two. This assessment of the recording behaviour was based on the need for a behaviour that is as equally likely as unlikely to be enacted. This is important for the second phase so that the results in the second

phase are attributable to the scenario and not an additional unknown concern regarding the behaviour of the respondent.

Table 5

The Ratio of Themes in Responses to All Questions for All Behaviours

Questions	Behaviours					
	Legal and Normed		Illegal and Normed		Illegal and Not Normed	
	CS	Record	IDU	TWD	PA	B&E
Adv/Disadv	3:5	1:1	1:2	5:4	5:7	6:7
App/Disapp	3:2	3:2	1:1	1:1	1:1	1:1
Enable/Prevent	4:3	3:4	5:2	3:2	1:1	5:4
Enact/NotEnact	1:1	1:1	1:1	1:1	1:1	1:1

The second criterion that was used to decide between the two behaviours was an examination of the groups who were added to the provided lists. The addition of a *none* group and *church friends* to consensual sexting suggested lower acceptability of the behaviour to the sample. The addition of *church friends* and *family* to consensual sexting along with the theme of belief systems as a preventative factor suggested that recording would be the better choice for further investigation since internal belief systems could not be controlled.

In terms of the legal and normed behaviours, the ratios displayed in Table 5 indicate that recording is the better of the two behaviours to be used in phase II. For illegal and normed behaviours, texting while driving was chosen for further investigation in phase II because based on the first criterion, this behaviour had the closest and most one-to-one ratio across all four pairs of questions as shown in Table 5, as compared to illicit drug use. Based on the second criterion, the groups that were added to both behaviours were similar across the questions. As a result, a third criterion was examined. Specifically, how likely the enabling factors were to occur on a day-to-day basis for texting while driving as opposed to those for illicit drug use. Also, the themes with the highest frequency for groups who would enact texting while driving was *friends* of *high value*.

For the illegal and not normed behavioural type, physical assault was chosen. Based on the first criterion, physical assault was the better option. Based on the second criterion the addition of the *none*, *N/A*, and *I don't know* options to the responses to breaking and entering suggested less norming of the behaviour to the sample. While the addition of *none* did occur with physical assault, this was not unexpected, but the addition of the *N/A* and *I don't know* options suggested an additional level of unacceptability.

As a result, the three behaviours that were chosen and used in the second phase were recording or photographing persons in public, texting while driving, and physical assault.

CHAPTER 3: A MULTIFACETED EXPLANATION OF ANTISOCIAL BEHAVIOUR

INTRODUCTION

According to dispositional theories, antisocial behaviour is a function of an innate aspect of an individual (Ajzen, 1987; Andrews et al., 1990). However, dispositional theories do not take into consideration external or situational factors. The purpose of this study was to examine whether antisocial behaviour could be explained by situational factors. If antisocial behaviour is due to disposition, the display of antisocial behaviour should be consistent across context and time. However, if antisocial behaviour results from external or situational factors, antisocial behaviour is less likely to be consistent across context or time for the individual.

This study investigated the possibility that antisocial behaviour could result from the situation individuals find themselves in. Specifically, the group that individuals are members of includes norms about the endorsement of antisocial behaviours and how those norms are enacted without cognitive dissonance, thereby allowing for the enactment or not of different antisocial behaviours. To measure the enactment of antisocial behaviours, valued groups and behavioural types were manipulated using a series of scenarios.

The purpose of this study was to determine how behavioural type, social identity, and neutralizations allow the enactment of antisocial behaviour. The behavioural type was operationalized with two features: legality and norming. The legal and normed features were manipulated with three types of behavioural scenarios: (a) a behavioural scenario that was legal and normed to the friend group; (b) a behavioural scenario that was illegal and normed to the friend group; and (c) a behavioural scenario that is illegal and not normed to the friend group. There is a fourth possible behavioural scenario that could have been added to the study, a legal and not normed, but this type of behaviour was not of interest in the current study.

Group membership, which represents social identity, was operationalized by manipulating the valued group depicted in the scenario as being friends or parents. Based on the results from the first phase of the study, the friend group was chosen as a valued group because friends tended to be the group that had the highest frequencies for approving and supporting the enactment of the normed behaviours. The parents group was also chosen as a valued group

because it had the highest frequencies for groups who would not enact or approve of the behaviour. Based on these results, both groups were deemed valuable to the participants but the behaviour was only normed to the friends group.

Neutralization was operationalized by manipulating the type of neutralization depicted in the scenario as proposed by Sykes and Matza (1957). All five of Sykes and Matza's (1957) neutralizations were investigated in this study, namely Denial of Victim, Injury, Responsibility, Condemnation of the Condemner, and Appeal to Higher Loyalties.

To investigate the theoretical model (Figure 3) Structural Equation Modelling (SEM) was completed. To complete the SEM, Social Identity was operationalized by the Measure of Criminal Attitudes and Associates (Mills & Kroner, 1999) and the Endorsement of Antisocial Behaviours was operationalized by the Criminal Sentiments Scale (Andrews & Wormith, 1984).

The two research questions and their corresponding hypotheses investigated in this second phase are described below:

1. Are antisocial behaviours enacted as a result of situational factors?

    Hypothesis 1: There would be a main effect of behaviour with the highest acceptability ratings being reported for the scenarios depicting the legal and normed behaviour, followed by the scenarios depicting the illegal and normed behaviour, and then the scenarios depicting the illegal and not normed behaviours.

    Hypothesis 2: There would be a main effect of the valued group with a higher acceptability rating for the scenarios depicting the behaviour for friends rather than for parents.

    Hypothesis 3: There would be a main effect of neutralization with the highest acceptability ratings occurring for scenarios depicting neutralizations than for the scenario where no type of neutralization is mentioned.

    Hypothesis 4: Although 2-way interactions were expected, they would be qualified by a behaviour type by valued group by neutralization 3-way interaction. The behavioural scenarios with friends that describe behaviour that is normed and that includes a form of neutralization would have higher acceptability ratings than the behavioural scenarios with parents that are normed to the friends group and include neutralizations.

2. Can individuals possess both antisocial and prosocial value systems that are enacted

based on situational factors?

Hypothesis 5: The model for texting while driving with friends will have a better fit than the model for texting while driving with parents, but there will be no difference between the two valued groups for the other two behaviours.

Hypothesis 6: There will be no difference in fit across recording or texting while driving but there would be less fit with physical assault within both valued groups of friends and parents.

Hypothesis 7: There will be less fit with physical assault within both valued groups of friends and parents.

The first research question in this phase was tested using Repeated Measures ANOVA while the second research question was tested using Structural Equation Modeling (SEM). To complete structural equation modelling, the correlation matrix must be shown to exist within the collected data, that is, the theoretical model exists based on the data. The correlation matrix must also not indicate a correlation of 1 as this would indicate multicollinearity and this would render structural equation modelling implausible as an analysis method.

3. 0 METHODOLOGY

3.1 PARTICIPANTS

Four hundred and seventy-eight participants, between 17 and 26 years of age (M = 20.63, SD = 3.635) completed the online survey. The majority of the respondents self-reported as being female (n = 347; 72%), White (n= 318; 66.5%), and single (66.9%). Complete demographic data are reported in Table 3.1.

Table 3.1

Frequencies and Percentages of Demographic Data

Variables	Categories	Frequency	Percent
Age	17 - 21	360	76.8
	22 - 26	78	16.6
	27 - 31	17	3.6
	32 - 36	10	2.1
	37 - 41	4	0.9
	Missing	9	1.9
	Total	478	100
Sex	Female	344	72
	Male	111	23.2
	Prefer not to Disclose	1	0.2

Variables	Categories	Frequency	Percent
	Missing	22	4.6
	Total	478	100
Gender	Female	347	72.6
	Male	114	23.8
	Fluid or Non-Binary	3	0.6
	Prefer not to Disclose	3	0.6
	Missing	11	2.3
	Total	478	100
Race	White Caucasian	318	66.5
	Asian	51	10.7
	Mixed	16	3.3
	Brown	15	3.1
	Black	10	2.1
	Indigenous	10	2.1
	Indian	8	1.7
	Arab	5	1.0
	Middle Eastern	4	0.8
	African	3	0.6
	African American	2	0.4
	Pakistani	2	0.4
	Undeclared /Jamaican/ Nigerian Canadian / Canadian / Australian/ Indigenous Australian and German	1	0.2
	Missing	25	5.2
	Total	478	
Ethnicity	White European	172	36
	Canadian	101	21.1
	Asian and Mixed	34	7.1
	Pakistan	16	3.3
	African and Indigenous	15	3.1
	Arab	3	
	Black/ Jewish / Middle Eastern / Muslim /Latina /Persian	2	0.4
	USA / Lebanese / Bangladesh / Western Culture / Sri Lanka/Mediterranean	1	
Marital Status	Single	320	66.9
	Dating	10	2.1
	Engaged	6	1.2
	In a relationship	23	4.8
	Unmarried	55	11.5
	Common-Law	17	3.6
	Married	8	1.7
	Courting	1	0.2
	Divorced	2	0.4
	Separated	1	0.2
	Complicated	1	0.2
	No response	34	7.1

3.2 MEASURES

3.2.1 The Neutralization Measure-Revised

The Neutralization Measure-Revised is a new measure that was developed for this study. It is a revised version of the Neutralization Measure developed by Atkinson in 1998. The Atkinson (1998) scale was not feasible for the present study because the Atkinson (1998) scale only investigates illegal activity, which was not the case in the current study. A legal sentence, which is the response type in the Atkinson (1998) scale, would not be applicable in the current study because each of the behavioural scenarios included two dimensions, legality and norming. Also, the focus in this second phase of the current study was to investigate the respondent's subjective view on the acceptability of the behaviour, not the respondent's subjective view on the legal ramifications for the behaviour.

The Neutralization Measure-Revised consists of scenarios and questions that describe a person enacting one of three behaviours with a neutralization and a valued group present. Given that there are two valued groups (parents and friends) and three behaviours (photographing or recording persons in public, texting while driving, and physical assault), there are six scenarios. Each of the six scenarios is accompanied by six variations on the initial scenario. The variations represent one of the five neutralizations: Denial of Violence, Denial of Injury, Denial of Responsibility, Appeal to Higher Loyalties, and Condemnation of the Condemner. The sixth scenario included no neutralization. There is also a control scenario for each behaviour and valued group, resulting in six control scenarios, one for each behaviour and the valued group. The control scenarios are expected to be rated as *very unacceptable*. These scenarios are included as a control check to verify that the respondents read and understood the scenarios. For example, the control for photographing or recording persons in public was *"the person uses the recordings to make altered nude images of the persons who appear in the recordings. How acceptable is the person's recording of people in public?*" Respondents indicate the acceptability of the behaviour described on a five-point rating scale from *very unacceptable* to *very acceptable*. The value of the group is indicated on a four-point rating scale including *high, moderate, low*, and *no value*.

For each scenario, there are nine questions. Of the nine questions, the first question asks about the acceptability of the behaviour depicted in the scenario followed by how acceptable the valued group, either friends or parents, would find the behaviour. Participants are asked to indicate the level of acceptability of the scenarios with the six proceeding questions. The ninth

question asked participants to rate the value of the valued group mentioned in the scenarios. There are six blocks of nine questions for a total of 54 questions.

There was no expectation that acceptability would decrease given that the additional information in each scenario explained the rationalization of the individual's behaviour. A control statement was added for each scenario, for which there was an expectation of decreased acceptability, to verify that the scale was understood and working as expected (Appendix D).

3.2.2 Criminal Sentiments Scale (Andrews & Wormith, 1984)

The Criminal Sentiments Scale is a 41-item self-report measure with subscales that assess values, beliefs, and rationalizations that support criminal conduct (Andrews & Wormith, 1984). The three subscales are: (a) Laws, Courts, and Police (LCP), (b) Tolerance of Law Violation (TLV), and (c) Identification with Criminal Others (ICO; Andrews & Wormith, 1984). The subscale of LCP is a 25-item subscale that measures attitudes towards the law, courts, and police. The TLV subscale is a 10-item scale that does an adequate job of covering positive attitudes towards deviance, although most of these items also include a process component (i.e., justification or neutralization of these negative attitudes; Sykes & Matza 1957), which makes this subscale the least pure measure of criminal thought content on the Criminal Sentiments Scale (Walters, 2016). The ICO subscale consists of six items that measure criminal identity. The entire scale consists of a 5-point response option with 1 = *strongly disagree*, 2 = *disagree*, 3 = *uncertain*, 4 = *agree,* and 5 = *strongly agree*.

Internal consistency for the Criminal Sentiments Scale total score has been found to range from .75 to .94, while the internal consistency for the sub-scales of LCP, TLV, and ICO subscales has been found to range from .67 to .94, .72 to .88, and .45 to .58, respectively (Andrews et al., 1990; Roy & Wormith, 1985; Walters, 2016; Witte at al., 2006). The Criminal Sentiments Scale has good internal consistency reliability (Berman, 2004; Witte et al., 2006), discriminative validity (Berman, 2004; Witte et al., 2006), and convergent validity (Witte, DiPlacido et al., 2006). Also, the predictive validity of prosocial changes is high for reduced recidivism (Berman, 2004; Rettinger, 1994), and prosocial changes are shown to have higher scores on LCP and lower scores on the TLV and ICO subscales.

Test-retest reliability is low after six months (.20-68; Witte, DiPlacido et al., 2006). Andrews and Wormith (1984) stated that the Criminal Sentiments Scale possesses "dynamic dependent validity" (p.11), which means it changes with changes in the respondent.

3.2.3 Measure of Criminal Attitudes and Associates (Mills & Kroner, 1999)

The Measure of Criminal Attitudes and Associates (Mills & Kroner, 1999) has two parts. The first part is the Criminal Friend Index (CrFI), which asks each participant to "identify the four adults they spend the most free time with, how much time they spend with them, and whether or not these individuals have some characteristics exemplifying criminal lifestyles" (Yessine & Kroner, 2004; p.7). It is scored by summing the number of "yes" responses to the characteristics identified for each friend, then multiplying that number by the value associated with the time spent. For scoring, 1 = less than 25%, 2 = 25% - 49%, 3 = 50%-74%, and 4 = 75%-100%. The values for the four friends are summed, which gives a total range of 0 to 64, with higher scores indicating increased involvement with criminal associates (Yessine & Kroner, 2004).

The second part of the Measure of Criminal Attitudes and Associates consists of a 46-item assessment of attitudes that has four subscales. These subscales include: Attitudes towards Violence (ATV); Sentiments of Entitlement (ATE); Antisocial Intent (ASI); and Attitudes towards Associates (ATA). The Attitudes toward Violence subscale consists of 12 items, which measures tolerance towards, and attitudes supportive of, violence, while the Attitudes Towards Entitlement subscale consists of 12 items, which measure the belief that one has the right to take whatever one wants. The subscale of Antisocial Intent (ASI) consists of 12 items, which measure the antisocial actions that respondents endorse or believe they would enact, and the Attitudes towards Associates (ATA) subscale consists of 10 items, which measure antisocial attitudes supportive of having antisocial friends. Participants are presented with an *agree/disagree* dichotomous choice for 46 statements. Statements are either antisocial or prosocial within the subscales, and each *agree* response to an antisocial statement or *disagre*e response to a prosocial one is assigned one point. However, each *agree* response to a prosocial statement and *disagree* response to an antisocial one is assigned zero points. The responses are summed for each subscale to give a subscale value with higher scores showing increasing antisocial attitudes (Yessine & Kroner, 2004).

Mills et al. (2002) examined the test-retest reliability, as well as the convergent, discriminant, and criterion validity of the Measure of Criminal Attitudes and Associates with Canadian federal offenders. The intraclass correlation for the scales were found to be: Total

= .81, Attitudes towards Violence = .73, ATE = .74, Antisocial Intent = .79, and Attitudes towards Associates = .65.

3.2.4 Paulhus Deception Scale (PDS, 1984, 1988, 1998)

The Paulhus Deception Scale (Paulhus, 1984, 1988, 19898) is the seventh version of the Balanced Inventory of Desirable Responding, which "measures one's tendency to give socially desirable responses" (Paulhus, 1998, p.1). The scale is a self-report instrument that identifies individuals who distort their responses on a survey. It is to be implemented concurrently with other instruments. The Paulhus Deception Scale consists of two subscales: the self-deception enhancement sub-scale and the impression management sub-scale. Self-deception enhancement is defined as the tendency to give honest but inflated self-descriptions, while impression management is defined as the tendency to give inflated self-descriptions because of contextual factors. Together, the subscales capture both principal forms of socially desirable responding (Paulhus, 1998). The scale allows for the identification of respondents who may be employing either self-deception, impression management, neither or both. Paulhus (1998) reported good internal reliability with the general population (r = .85), as well as with college students (r = .83), and with prison entrants (r = .86). Paulhus (1998) also reported good concurrent validity with the Marlowe - Crowne Scale (r = .71) and with the Multidimensional Social Desirability Inventory (Jacobson et al., 1977) (r = .80). Convergent validity was also found between the self-deception enhancement subscale and measures of repressive styles as indicated by reversal as measured by Ihilevich's (1986) Defense Mechanisms Inventory (r = .34), positive re-appraisal (r = .44), distancing (r = .33), and escape-avoidance (r = .839) measured with the Ways of Coping Scale (Lazarus & Folkman, 1984) (Paulhus, 1998). These correlations indicate the presence of positive thinking in situations where defensive and coping behaviours are warranted. Paulhus (1998) also stated that the impression management scale showed high convergence with different measures traditionally known as lie scales. Self-deception enhancement and impression management form separate factors (Paulhus, 1998) and the self-deceptive enhancement sub-scale correlates positively with impression management.

According to the Paulhus Deception Scale Manual (Paulhus, 1998), to score the scale and sub-scales, the responses to the odd-numbered questions are transformed such that the highest possible response is coded as one, while all other response options are recoded to zero. The even-numbered question responses are transformed such that the lowest possible response option is

coded as one, while all other responses are recoded to zero. Items 1 to 20 are summed to give a total score for self-deceptive enhancement, while items 21 to 40 are summed to give a total for the sub-scale of impression management. The total scale score is calculated by summing the total self-deceptive enhancement and impression management scores.

3.2.5 Demographics Questionnaire

The Demographics Questionnaire included questions about age, sex, gender, race, ethnicity, and marital status. All the questions were open-ended to allow participants to self-identify as opposed to asking participants to place themselves into a preconceived category.

3.3 DESIGN

The research design was 3 [Behaviour; Recording or photographing people in public (REC), texting while driving (TWD), physical assault (PA)] x 2 (Valued Group; friends, parents) x 6 [Neutralization; None, Denial of Injury (DOI), Denial of Victim (DOV), Denial of Responsibility (DOR), Appeal to Higher Loyalties (AHL), Condemnation of the Condemner (Condemn)] within-subjects quasi-experimental design. The dependent variable was the acceptability of the behaviour depicted in the scenario on a five-point rating scale from *very unacceptable* to *very acceptable*.

3. 4 PROCEDURE

Participants were able to access the study either by being registered in an eligible undergraduate Psychology class in the academic year 2019 - 2020 or by opting to participate from the PAWS (Personalized Access to Web Services) announcement. The survey was completed online. On the first page, participants indicated that they read and understood the informed consent form by checking yes to a question about informed consent (Appendix C). Participants were first asked to complete the Neutralization Measure-Revised (Appendix D). After responding to all 54 questions of the Neutralization Measure-Revised, participants completed the Criminal Sentiments Scale (Andrews & Wormith, 1984; Appendix E), followed by the Measure of Criminal Attitudes and Associates (Mills & Kroner, 1999; Appendix F), the Paulhus Deception Scale (Paulhus, 1998; Appendix G), and then the open-ended demographic questions (Appendix H).

The survey took approximately 30 minutes for each participant to complete. The participants who accessed the study via PAWS received no direct remuneration for their participation. However, the participants who accessed the study through the Psychology

participant pool received class credit. Credit is given to all students who participate in the studies that are made available in the participant pool and that credit is assigned by the coordinator who has no relationship to the studies within the pool. Once participants submitted their responses, the data were immediately available on SurveyMonkey to the student-researcher. After 499 participants completed the survey, the link was closed, and the data were downloaded and stored on a password-protected computer.

3. 5 RESULTS

3. 5. 1 DATA CLEANING

The data were exported to SPSS 25. Before data analyses, dataset cleaning was conducted following the process outlined in Tabachnik and Fidell (2007). The total number of respondents from PAWS and the Psychology participant pool was 43 and 456, respectively, for a total N of 499. First, responses were reviewed for completion and the code '9999' was used to fill in missing data. Checks of data accuracy and statistical assumptions were completed. Checks of data accuracy involved checking the data for plausibility. Also, all the minimum and maximum data were checked for alignment with the response options, and they were all found to align.

The statistical assumptions of normality, homoscedasticity, and absence of multicollinearity (Camman, 2012; Howell, 2009; Tabachnik & Fidell, 2007) were all investigated. Histograms with normal curves were generated for all variables to check the normality of the variables. The data were checked for outliers and normality and it was found that the data were not normally distributed and had outliers present. However, the non-normality of the data was not sufficient to violate the assumptions of the planned analyses, therefore the data were not normalized. Data were checked for missing data and it was found that for 21 respondents, more than 50% of the responses to the manipulated variables was missing and as a result, the data for these participants were removed (Tabachnik & Fidell, 2007). The final N was 478 with 449 (93.9%) from the Psychology participant pool and 29 (6.1%) from PAWS. The 21 respondents with more than 50% missing responses included 7 from the Psychology participant pool and 14 from PAWS. The data showed no homoscedasticity as all VIF values were below 10. However, multicollinearity was detected as some of the VIF values were above 3, however since there was no homoscedasticity, the VIF was not problematic and the analyses corrected for any issues with the VIF.

3. 5. 2 DESCRIPTIVE STATISTICS FOR MEASURES

Calculation of the scores for scales and sub-scales for the Criminal Sentiments Scale, Measure of Criminal Attitudes and Associates, and Paulhus Deception Scale were completed. The mean score for the Criminal Sentiments Scale was 128.65, SD = 10.003, with an N of 476. The Cronbach's alpha for the Criminal Sentiments Scale with this sample was .724 (.730 based on standardized items) with 41 items. In terms of the Criminal Sentiments Scale, the sample had a lower mean on attitudes towards LCP, a higher mean on TLV, and a lower, but similar mean, on ICO, as shown in Table 3.2. The results for this sample were, therefore, most similar to the norms for undergraduate students. A higher mean on LCP reflects respect for the law and criminal justice system without specific reference to law violations or law violators (Andrews et al., 1984). A higher mean on TLV reflects justifications for illegal activity and higher means on the ICO reflect higher identification with criminal others (Andrews et al., 1984). The present sample, therefore, had scores that fell between those found for psychiatric offenders and non-offenders in terms of respect for law and criminal justice. The sample had a high mean for justification of law violation that fell between the mean scores for offenders and psychiatric offenders. The sample has scores that indicated low ICO, which had the lowest mean across all norms.

Table 3.2

Means, Standard Deviations, and Effect Size (Hedge's g) of Criminal Sentiments Scale Sub-Scale Scores of the Present Study compared to Undergraduate Norms (Andrews et al., 1984)

	Laws, Courts and Police	Tolerance of Law Violations	Identification with Criminal Others
Group: Means (SD)			
Present Study (N = 476)	*87.33 (11.5999)*	*26.96 (3.301)*	*18.02 (1.864)*
Undergraduate (N = 440)	93.2 (9.7)	24.2 (4.7)	14.8 (3.3)
Hedge's g	.547093	.684191	1.21391

To understand the current sample's scores, they were compared to the scores of the sample in Andrews and Wormith's (1984) study using Hedge's *g*. Hedge's *g* accounts for different sample sizes and therefore different standard deviations. Hedge's *g* can be seen in Table 3.2, which also shows the means, standard deviations, and sample size of an undergraduate sample reported by Andrews and Wormith (1984). The effect size for LCP and TLV were large but in reference to ICO, the samples differed by over one standard deviation. When interpreting the effect size, one has to take into consideration the small number of items for the subscale of

ICO. Effectively, the 1984 sample and the current study's sample are moderately different on LCP and TLV and seemingly more disparate on ICO.

For the Measures of Criminal Attitudes and Associates, the means, standard deviations, and sample size are shown in Table 3.3. The second part of the Measures of Criminal Attitudes and Associates includes the four subscales of Attitudes towards Violence (ATV), Sentiments of Entitlement (ATE), Attitudes towards Associates (ATA), and Antisocial Intent (ASI). The four scales were summed to calculate totals for the four subscales. Higher scores on the ATV subscale indicate endorsement of attitudes that are supportive of violence. Higher scores on the ATE sub-scale indicate attitudes that focus on one's belief in the right to take whatever one wants. Higher scores on the ATA subscale indicate a high endorsement of association with criminal others. Higher scores on the ASI subscale indicate the potential for the individual to enact antisocial actions in the future.

The scores for the sample in the current study were compared to those of normed populations for students and offenders (Table 3.3) to understand whether the sample in the current study had scores similar to the norms for offenders or students. As shown in Table 3.3, Part B, the Associates and Entitlement sub-scales are similar to the student population, however, the means for the total Measures of Criminal Attitudes and Associated as well as the subscales of Violence and, Antisocial Intent are closer to the offender population means. Given that higher scores indicate more antisocial traits, this sample has higher antisocial scores on the overall scale of the Measure of Criminal Attitudes and Associates and the Antisocial Intent and Violence subscales.

Table 3.3

Means and Standard Deviations for the Measure of Criminal Attitudes and Associates in Present Sample and Normed Populations

Measures of Criminal Attitudes and Associates	Student Means (n = 60)		Offender Means (Part A, n = 101; Part B, n = 342)		*Present Study Means (Part A, n = 478; Part B, n = 476)*	
	Mean	SD	Mean	SD	*Mean*	*SD*
Part A						
Number of Criminal Friends	1.5	1.6	1.2	1.3	*1.43*	*1.99*
Criminal Friends Index	4.2	5.4	5.7	7.4	*2.85*	*4.249*
Part B						
Violence (ATV)	4.6	3.0	2.3	2.4	*2.89*	*2.515*
Entitlement (ATE)	4.6	2.2	4.2	2.3	*4.52*	*2.399*
Antisocial Intent (ASI)	4.0	2.9	2.3	2.7	*2.93*	*2.412*
Associates (ATA)	4.2	2.4	4.9	3.0	*2.93*	*2.289*
MCAA Total	17.4	6.9	13.6	7.9	*13.27*	*6.589*

Table 3.4 shows the t-scores for the nine categories of the Paulhus Deception Scale and the means for those categories for the current sample. The Paulhus Deception Scale consists of the impression management and self-deception enhancement subscales. The minimum score for impression management was 36.24, the minimum score for self-deception enhancement was 34.89, and the total Paulhus Deception Scale was 33.17. The maximum scores were 86.03 (impression management), 82.09 (self-deception enhancement), and 89.81 (Total). Cut-off scores for the t-score for Paulhus Deception Scale are below 30 and above 70. Cronbach's alpha for the Paulhus Deception Scale was .620 and values above .6 are considered satisfactory.

Table 3.4

Interpretation and Frequencies of PDS Scores

T-Score	Interpretation	Frequencies of Paulhus Deception Scale		
		Impression Management	Self-deception Enhancement	Total
Below 30	Very much below average	-	-	-
30-34	Much below average	-	-	21
35-39	Below average	64	-	32
40-44	Slightly below average	73	78	41
45-55	Average	193	194	215
56-60	Slightly above average	59	-	41
61-65	Above average	45	40	19
66-70	Much above average	22	31	6
Above 70	Very much above average	22	19	18

The majority of the sample scored average on both sub-scales and none of the sample scored below 30. However, for the two subscales and total score, some respondents scored above 70. According to Paulhus (1998), values below 30 and above 70 could indicate faking, but there are other possible interpretations such as maladjustment or carelessness. Another explanation is an unusually saint-like appearance as shown with a finding by Quinn (1989) in which the highest Impression Management scores were found. It was noted at the time that it was not clear if the score above 70 indicated a high degree of desirable behaviour or a high tendency towards socially desirable responding. Impression management t-scores above cut-off indicate that the responses of those respondents should be interpreted with caution for individual case studies. In the current study, the few scores above 70 are not considered detrimental to the findings (Paulhus, 1989).

The means and standard deviations of the acceptability ratings to the valued groups as well as the value of the valued group in responding to the scenarios were calculated and are shown in Table 3.5 and 3.6, respectively. The value of the group is indicated on a four-point rating scale including *high, moderate, low*, and *no value*. Respondents indicated the acceptability of the behaviour described on a five-point rating scale from *very unacceptable* to *very acceptable*.

Table 3.5

Means and Standard Deviations of Valued Groups to Respondents

Behaviour	Group	Means	Standard Deviation
Recording or Photographing Persons in public	Friends	2.78	.956
	Parents	2.69	1.007
Texting while Driving	Friends	2.60	1.007
	Parents	2.30	1.130
Physical Assault	Friends	2.88	.991
	Parents	2.50	1.143

Table 3.6

Means and Standard Deviations of Acceptability of Behaviour to Valued Groups

Behaviour	Group	Means	Standard Deviation
Recording or Photographing Persons in public	Friends	3.18	1.178
	Parents	2.42	1.226
Texting while Driving	Friends	2.76	1.225
	Parents	1.46	.884
Physical Assault	Friends	1.38	.734
	Parents	1.07	.338

3. 5. 3 ARE ANTISOCIAL BEHAVIOURS ENACTED AS A RESULT OF SITUATIONAL FACTORS?

Hypotheses 1 to 4 were tested with a 3 [Behaviour; recording or photographing people in public (REC), texting while driving (TWD), physical assault (PA)] x 2 (Valuable Group; friends, parents) x 6 [Neutralization; None, Denial of Injury (DOI), Denial of Victim (DOV), Denial of Responsibility (DOR), Appeal to Higher Loyalties (AHL), Condemnation of the Condemner (Condemn)] repeated measures ANOVA. The dependent variable was the acceptability of the depicted behaviour. The ANOVA indicated the assumption of sphericity was violated for the behaviour and group variables, χ^2 (2) = 49.945, p = <.001, and for the neutralization variable, χ^2 (14) = 424.668, p = <.001. The assumption of sphericity was violated for behaviour x group, χ^2 (2) = 6.829, p = .033, for behaviour x neutralization, χ^2 (54) = 1652.389, p = <.001, for group x neutralization, χ^2 (14) = 92.407, p = <.001, and for behaviour x group x neutralization, χ^2 (54) = 432.824, p = <.001. As a result of these violations, the degrees of freedom were corrected using the Huynh-Feldt estimates of sphericity ($\varepsilon > .754$).

There was a main effect of behaviour, F (1.818, 829.233) = 143.748, p = <.001, η^2 = .240, with an observed power of 1. The mean acceptability of the behaviours decreased as the

behaviour moved from legal and normed to illegal and not normed, with the recording of persons in public having the highest acceptability rating (M = 2.593, SE = .048) followed by texting while driving (M = 1.882, SE = .048) and finally physical assault (M = 1.870, SE = .023). Bonferroni tests indicated that all comparisons between the mean acceptability of the behaviours were significant (see Table 3.7 for the results of the Bonferroni tests).

Table 3.7

Bonferroni Comparison for Behaviours

Behaviours (I)	Behaviours (J)	Mean Difference (I-J)	Std. Error	Sig
Record	TWD	.711*	.055	<.001
Record	PA	.723*	.050	<.001
TWD	PA	.012*	.041	<.001

Based on estimated marginal means

* The mean difference is significant at the .05 level.

[b] Adjustment for multiple comparisons: Bonferroni.

Record = Recording or photographing people in public, TWD = Texting while Driving, and PA = Physical Assault

There was a significant main effect for group, F (1, 456) = 15.975, p = <.001, η^{2} = .034 with an observed power of .979, with friends receiving a higher acceptability rating (M = 2.145, SE = .027) than parents (M = 2.085, SE = .025). There was a main effect for neutralization, F (3.640, 1659.867) = 540.372, p = <.001, η^{2} = .542 with an observed power of 1. Denial of Responsibility had the highest mean acceptability (M = 2.677, S.E = .034), followed by Appeal to Higher Loyalties (M = 2.374, S.E = .030), Denial of Victim (M = 2.239, S.E = .030), Denial of Injury (M = 1.869, S.E = .026), no neutralization (M = 1.852, SE = .025), and finally Condemnation of the Condemner (M = 1.679, S.E = .025). Bonferroni comparisons, which are reported in Table 3.8, indicated that all means were significantly different from one another.

Table 3.8

Repeated Measures ANOVA Mean Differences in Neutralization Types

Neutralization (I)	Neutralization (J)	Mean Difference (I-J)	Standard Error	Significance
No Neutralization	Denial of Injury	-.016	.014	<.001
	Denial of Responsibility	-.824*	.026	<.001
	Denial of Victim	-.387*	.021	<.001
	Appeal to Higher Loyalties	-.552*	.026	<.001
	Condemnation of the Condemner	.174*	.018	<.001
Denial of Injury	Denial of Responsibility	-.808*	.025	<.001
	Denial of Victim	.371*	.020	<.001
	Appeal to Higher Loyalties	-.505*	.025	<.001
	Condemnation of the Condemner	.190*	.017	<.001
Denial of Responsibility	Denial of Victim	.437*	.024	<.001
	Appeal to Higher Loyalties	303*	.023	<.001
	Condemnation of the Condemner	.998*	.028	<.001
Denial of Victim	Appeal to Higher Loyalties	-.135*	.027	<.001
	Condemnation of the Condemner	.561*	.022	<.001
Appeal to Higher Loyalties	Condemnation of the Condemner	.695*	.027	<.001

The interaction of behaviour x group was significant, F (1.979, 902.484) = 6.620, p = .001, η^{2} = .014 with a power of .912. Post hoc mean comparisons using least significant differences (LSD) indicated that there were significant mean differences for all behaviours and valued groups except for with friends and parents with texting while driving and physical assault, which had a p-value of .150 and .350, respectively, whereas all other differences had a p-value of < .001 at the .05 level, as is indicated in Table 3.9.

Table 3.9

Repeated Measures ANOVA Mean Differences in Behaviour x Group

Group	Behaviour (I)	Behaviour (J)	Mean Difference (I-J)	Standard Error	Significance
Friends	Recording or Photographing Persons in Public	Texting while Driving	.661*	.058	<.001
	Recording or Photographing Persons in Public	Physical Assault	.728*	.053	<.001
	Texting while Driving	Physical Assault	.067	.046	.150
Parents	Recording or Photographing Persons in Public	Texting while Driving	.765*	.057	<.001
	Recording or Photographing Persons in Public	Physical Assault	.726*	.052	<.001
	Texting while Driving	Physical Assault	-.039	.042	.350

The interaction of behaviour x neutralization was significant, F (5.122, 2335.836) = 425.712, p = <.001, η^2 = .483 with power of 1. Post-hoc pair-wise comparisons using least significant differences indicated that there were significant differences at the .05 level in the mean acceptability rating across all behaviours and neutralizations except for Denial of Victim with texting while driving and physical assault, which was not significant at p = .056. These results are shown in Table 3.10.

Table 3.10

Repeated Measures ANOVA Mean Differences in Behaviour x Neutralization

Neutralization	Behaviour (I)	Behaviour (J)	Mean Difference (I-J)	Standard Error	Significance
None	Recording or Photographing Persons in Public	Texting while Driving	1.054*	.059	<.001
	Recording or Photographing Persons in Public	Physical Assault	1.461*	.054	<.001
	Texting while Driving	Physical Assault	.407*	.042	<.001
Denial of Injury	Recording or Photographing Persons in Public	Texting while Driving	.669*	.066	<.001
	Recording or Photographing Persons in Public	Physical Assault	.288*	.061	<.001
	Texting while Driving	Physical Assault	-.380*	.055	<.001
Denial of Responsibility	Recording or Photographing Persons in Public	Texting while Driving	.950*	.059	<.001
	Recording or Photographing Persons in Public	Physical Assault	-.427*	.073	<.001
	Texting while Driving	Physical Assault	-1.376*	.068	<.001
Denial of Victim	Recording or Photographing Persons in Public	Texting while Driving	.831*	.060	<.001
	Recording or Photographing Persons in Public	Physical Assault	.727*	.060	<.001
	Texting while Driving	Physical Assault	-.104	.054	.056
Condemnation of the Condemner	Recording or Photographing Persons in Public	Texting while Driving	1.038*	.057	<.001
	Recording or Photographing Persons in Public	Physical Assault	1.295*	.055	<.001
	Texting while Driving	Physical Assault	.257*	.040	<.001

Neutralization	Behaviour (I)	Behaviour (J)	Mean Difference (I-J)	Standard Error	Significance
Appeal to Higher Loyalties	Recording or Photographing Persons in Public	Texting while Driving	-.262*	.068	<.001
	Recording or Photographing Persons in Public	Physical Assault	1.016*	.051	<.001
	Texting while Driving	Physical Assault	1.279*	.057	<.001

The interaction of group x neutralization was also significant, F (4.679, 2133.631) = 10.841, p = <.001, η^2 = .023 with a power of 1. Post hoc pair-wise comparisons using the least significant difference indicated that there was a significant difference in the mean acceptability ratings across valued groups for all neutralizations, except no neutralization (p = .077), as shown in Table 3.11.

Table 3.11

Repeated Measures ANOVA Mean Differences in Group x Neutralization

Neutralization	Group (I)	Group (J)	Mean Difference (I-J)	Standard Error	Significance
None	Friends	Parents	-.039	.022	.077
Denial of Injury	Friends	Parents	-.613*	.028	<.001
Denial of Responsibility	Friends	Parents	.287*	.029	<.001
Denial of Victim	Friends	Parents	.567*	.031	<.001
Condemnation of the Condemner	Friends	Parents	-.066*	.021	.002
Appeal to Higher Loyalties	Friends	Parents	-.230*	.022	<.001

The 3-way interaction of behaviour x group x neutralization was significant, F (8.450, 3853.167) = 5.856, p = <.001, η^2 = .013 with a power of 1. Post hoc pair-wise comparisons indicated that there was a significant difference in the mean acceptability ratings across all behaviours, neutralizations, and valued groups combinations, except for two combinations. Specifically, the comparisons for friends, the denial of victim between recording and physical assault (p = .541) and with parents, the denial of responsibility with recording and physical assault (p = .130) were not significant at the $p = .05$ level. These results are displayed in Table 3.12.

Table 3.12

Repeated Measures ANOVA Mean Differences in Behaviour x Group x Neutralization

Group	Neutralization	Behaviour (I)	Behaviour (J)	Mean Difference (I-J)	Standard Error	Significance
Friend	None	Recording or Photographing Persons in Public	Texting while Driving	1.018*	.064	<.001
		Recording or Photographing Persons in Public	Physical Assault	1.533*	.058	<.001
		Texting while Driving	Physical Assault	.515*	.049	<.001
	Denial of Injury	Recording or Photographing Persons in Public	Texting while Driving	.596*	.072	<.001
		Recording or Photographing Persons in Public	Physical Assault	1.294*	.063	<.001
		Texting while Driving	Physical Assault	.697*	.058	<.001
	Denial of Responsibility	Recording or Photographing Persons in Public	Texting while Driving	.897*	.064	<.001
		Recording or Photographing Persons in Public	Physical Assault	-.726*	.081	<.001
		Texting while Driving	Physical Assault	-1.623*	.078	<.001
	Denial of Victim	Recording or Photographing Persons in Public	Texting while Driving	.752*	.068	<.001
		Recording or Photographing Persons in Public	Physical Assault	-.050	.083	.541
		Texting while Driving	Physical Assault	-.803*	.083	<.001

Group	Neutralization	Behaviour (I)	Behaviour (J)	Mean Difference (I-J)	Standard Error	Significance
	Condemnation of the Condemner	Recording or Photographing Persons in Public	Texting while Driving	.989*	.063	<.001
		Recording or Photographing Persons in Public	Physical Assault	1.456*	.059	<.001
		Texting while Driving	Physical Assault	.467*	.045	<.001
	Appeal to Higher Loyalties	Recording or Photographing Persons in Public	Texting while Driving	-.285*	.073	<.001
		Recording or Photographing Persons in Public	Physical Assault	.860*	.061	<.001
		Texting while Driving	Physical Assault	1.145*	.065	<.001
Parents	None	Recording or Photographing Persons in Public	Texting while Driving	1.090*	.066	<.001
		Recording or Photographing Persons in Public	Physical Assault	1.388*	.063	<.001
		Texting while Driving	Physical Assault	.298*	.048	<.001
	Denial of Injury	Recording or Photographing Persons in Public	Texting while Driving	.741*	.069	<.001
		Recording or Photographing Persons in Public	Physical Assault	-.717*	.082	<.001
		Texting while Driving	Physical Assault	-1.458*	.076	<.001
	Denial of Responsibility	Recording or Photographing	Texting while Driving	1.002*	.063	<.001

Group	Neutralization	Behaviour (I)	Behaviour (J)	Mean Difference (I-J)	Standard Error	Significance
		Persons in Public				
		Recording or Photographing Persons in Public	Physical Assault	-.127	.084	.130
		Texting while Driving	Physical Assault	-1.129*	.078	<.001
	Denial of Victim	Recording or Photographing Persons in Public	Texting while Driving	.910*	.064	<.001
		Recording or Photographing Persons in Public	Physical Assault	1.504*	.058	<.001
		Texting while Driving	Physical Assault	.594*	.047	<.001
	Condemnation of the Condemner	Recording or Photographing Persons in Public	Texting while Driving	1.088*	.061	<.001
		Recording or Photographing Persons in Public	Physical Assault	1.134*	.062	<.001
		Texting while Driving	Physical Assault	.046	.050	.356
	Appeal to Higher Loyalties	Recording or Photographing Persons in Public	Texting while Driving	-.239*	.075	.001
		Recording or Photographing Persons in Public	Physical Assault	1.173*	.055	<.001
		Texting while Driving	Physical Assault	1.412*	.061	<.001

3. 5. 4 CAN A PERSON POSSESS BOTH ANTISOCIAL AND PROSOCIAL ATTITUDES WHICH CAN BE ENACTED DEPENDING ON THE SITUATIONAL VARIABLES OF BEHAVIOUR, VALUED GROUPS, AND NEUTRALIZATIONS?

Hypotheses 5, 6, and 7 were tested using Structural Equation Modeling (SEM). The data was exported from SPSS 25 to Mplus (Muthén & Muthén, 2012) for SEM analyses. Correlations were used to investigate the relationship between the Criminal Sentiments Scale (Andrews & Wormith, 1984), Measure of Criminal Attitudes and Associates (Mills & Kroner, 1999), as well as the Paulhus Deception Scale (Paulhus, 1984, 1988, and 1998); these correlations are reported in Table 3.13.

Table 3.13

Correlation Matrix of the Criminal Sentiments Scale, Measure of Criminal Attitudes and Associates, and Paulhus Deception Scale

Variable	IM	SDE	PDS TOTAL	LCP	TLV	ICO	CSS TOTAL	ATV	ATE	ASI	ATA
1.IM											
2.SDE	.414**										
3.PDS TOTAL	.833**	.848**									
4.LCP	-.004	.011	.004								
5.TLV	-.015	.005	-.006	-.385**							
6. ICO	-.090	.084	-.001	-.038	.161**						
7. CSS TOTAL	.013	-.004	.005	.968**	-.564**	-.068					
8.ATV	.020	.073	.056	-.108*	.311**	.018	.175**				
9.ATE	.035	.126**	.097*	-.271**	.280**	.134**	-.327**	.368**			
10.ASI	.057	.059	.069	-.278**	.297**	.005	-.319**	.318**	.224**		
11.ATA	.017	.004	.013	-.239**	.164**	.063	-.259**	.129**	.129**	.588**	
12.MCAA TOTAL	.048	.097*	.086	-.325**	.386**	.079	-.392**	.677**	.631**	.773**	.659**

*Note. IM = Impression Management SDE = Self-Deception Enhancement; PDS TOTAL = Paulhus Deception Scale Total; LCP = Laws, Courts, and Police; TLV = Tolerance of Law Violations, ICO = Identification with Criminal Others; CSS TOTAL = Criminal Sentiments Scale total score; ATV = Attitudes towards Violence; ATE = Sentiments towards Entitlements; ATA = Attitudes towards Associates; ASI = Antisocial Intent, MCAA TOTAL = Measure of Criminal Attitudes and Associates total score. *p<.05; **

As previously indicated, the correlation matrix indicates no multicollinearity, that is, no correlations of 1. As previously mentioned, the data showed no homoscedasticity as all VIF values were below 10. Multicollinearity was detected as some of the VIF values were above 3; however, since there was no homoscedasticity, the VIF was not problematic and the analyses corrected for any issues with the VIF. The correlation matrix provides empirical evidence that the sample did not use an unusual level of self-deceptive enhancement, which is indicated by the very low correlation between the self-deceptive enhancement and the entitlement subscale of the MCAA.

The correlation matrix provides important information to determine whether structural equation modelling is possible with the data. The correlation matrix allows for an initial investigation into the strength and direction of the relationships of the scales and sub-scales. The correlation matrix also shows the strength and direction of the standardized linear relationships between variables and is derived from the covariance matrix, which shows the direction of the unstandardized linear relationships between variables. Both the correlation and covariance matrices are models of the linear relationships between the variables in the study and are used as the basis for the Structural Equation Models. The iterations of the proposed models that MPlus (Muthén & Muthén, 2012) produces to determine the best fit are based on both matrices. The structural equation model is generated through the convergence of the data based on the correlation and covariance matrices. Equally important to structural equation modelling analyses is the absence of multicollinearity, which is indicated by a correlation of one. If variables are multicollinear, then analyses with these variables are not to be trusted as the interpretations may be a function of multicollinearity.

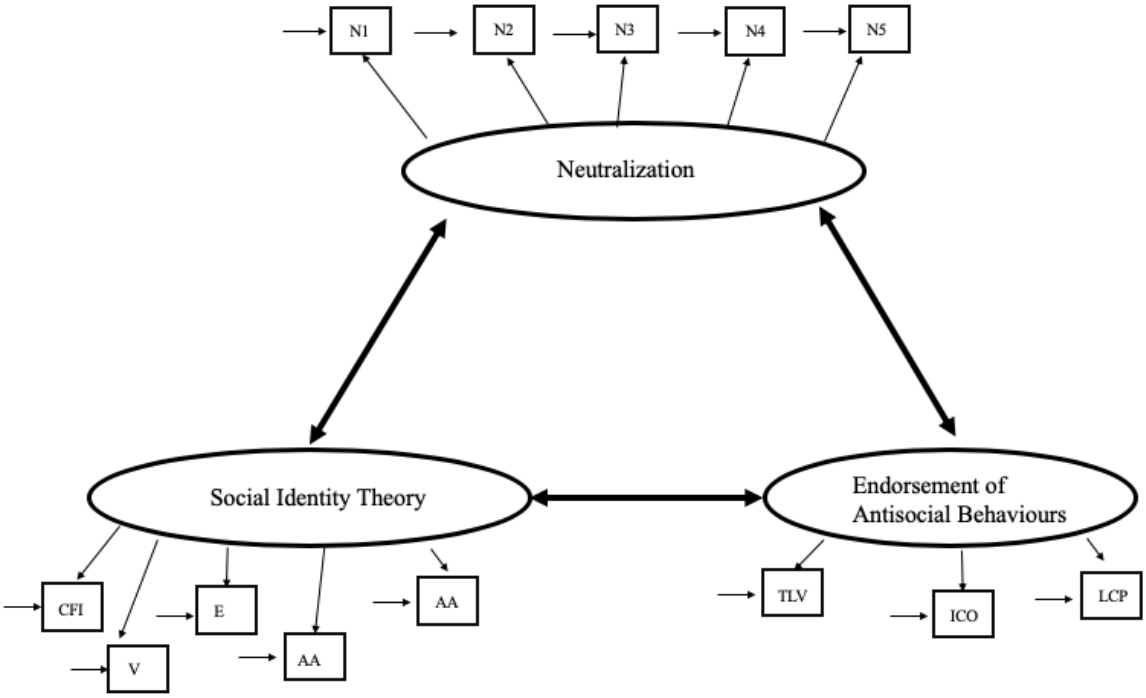
Structural Equation Models are interpreted using the goodness of fit indices. Kline (2005) noted a few reasons to report more than one fit index and those include: (a) there are no gold standard fit indices; (b) a fit index is a reflection of a particular aspect of the model; (c) a fit index does not indicate that the model is theoretically meaningful; (d) a fit index does not indicate the predictive power of the model; and (e) the sampling distributions of the many fit indices are unknown. For these reasons, it is best to report more than one fit index. Structural equation modelling in MPlus produces modification indices. These modification indices estimate the increased fit of the model if an additional relationship is added to the model. The greater the value of the modification index, the better the predicted improvement of the fit if the path is

added. Modification indices predict this improvement based on the data, but not on the theory. As a result, when adding predicted relationships, these relationships have to be examined for how well they align with the theory used in the current study. The four fit indices reported for each model are the chi-square (χ^2), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and the Root Mean Square of Error Approximation (RMSEA). These fit indices use different bases for their calculations. The chi-square is an absolute fit index and is the original fit index (West et al., 2012). While it is the original fit index, it has a limitation of being affected by sample size so that large sample sizes tend to produce large significant chi-square indices (West et al., 2012). The TLI is a relative fit index. Relative fit indices compare the chi-square for the tested model to a null model, where all measured variables are uncorrelated. This null model should always have a very large chi-square, which indicates a poor fit. The TLI is calculated using ratios of the model chi-square and the null model chi-square while considering degrees of freedom and they tend to range from 0 to 1 with a cut-off of .90. The TLI is a more conservative estimate than the CFI, but the cut-off for both is above .90 (Hooper et al., 2008). The third and fourth fit indices reported are the CFI and the RMSEA, which are both non-central based indices. Effectively, structural equation modelling is used to investigate the rejection of the alternate hypothesis, as opposed to rejecting or failing to reject a null hypothesis. A test that rejects the alternate hypothesis requires the assumption that the alternate hypothesis is true in the population and therefore compares the data to a perfect fit model. The limitation of the final two fit indices is that the parameter sample estimates are biased and may affect the fit indices that use this method (Raykov, 2000 & 2005). The CFI and TLI evaluate goodness-of-fit through maximizing explained variance (Hooper et al., 2008). The RMSEA, however, evaluates goodness-of-fit through minimizing unexplained variance and the cut-off is below .06 (Hu & Bentler, 1999).

The proposed model, as shown in Figure 3.1 is the basis for the modelling used in the Structural Equation Modeling analyses for testing the second research question. Six base models were tested, which resulted from the three behaviours of recording or photographing persons in public, texting while driving, and physical assault and two valued groups of parents and friends.

Figure 3.1

Proposed Structural Model for Enactment of Behaviour



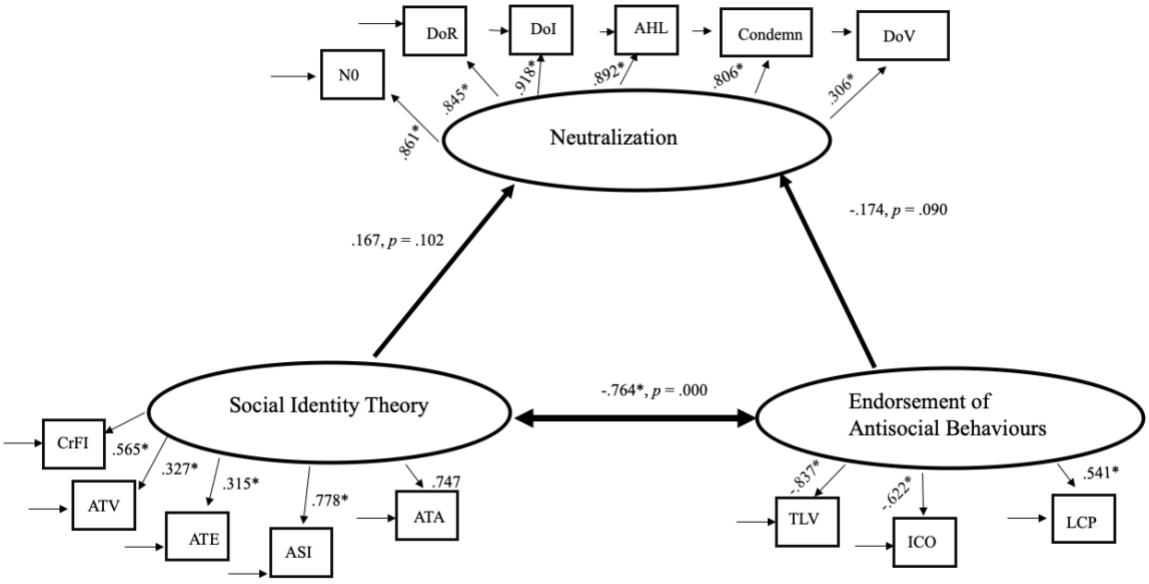
Note. N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; ASI = Antisocial Intent; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police.

3.5.4.1 Texting While Driving with Friends.

The base model (Figure 3.2) for texting while driving with friends had a significant goodness-of-fit test, χ^2 (74) = 372.961, p = <.001. The CFI was .908, but the TLI was .887, which was below the cut-off for a good fit, and the RMSEA was .092, p = <.001, which was above the cut-off for a good fit. While the CFI was close to 1, a CFI of at least .90 is needed to ensure misspecified models are not accepted (Hooper et al., 2008; Hu & Bentler, 1999).

Figure 3.2

Base Model for Friends and Texting while Driving

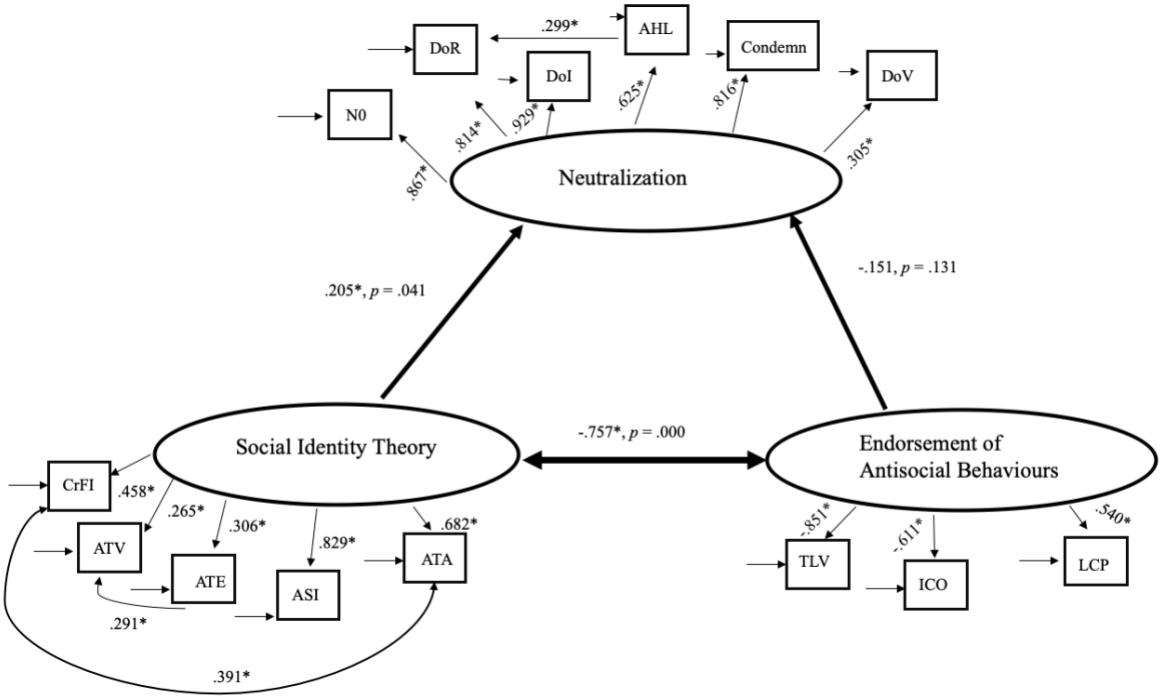


N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

An adjusted model was completed based on modification indices. This adjusted model (Figure 3.3) included adding a reciprocal relationship between the CrFI and ATA, and a relationship where ASI loaded on ATV and another where appeals to higher loyalties loaded on denial of responsibility. These three added pathways are theoretically sound resulting in a significant goodness-of-fit test, χ^2 (71) = 231.874, p <.001. However, the CFI increased to .951 and the TLI increased to .937, both above cut-off, but the RMSEA, while indicating better fit with a value of .069, p = .01, was still above the cut-off and not a good fit.

Figure 3.3

Adjusted Model for Friends and Texting while Driving



N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

The adjusted model, shown in Figure 3.3 indicated support for hypothesis four. All the fit indices for the base and adjusted models for friends and texting while driving are shown in Table 3.14.

Table 3.14

Fit Indices for the Base and Adjusted Models for Friends and Texting While Driving

Model	Paths Added/ Removed	Comparative Fit Index	Tucker-Lewis Index	Root Mean Square or Error Approximation	Chi-Square (df), *p*
Base (Figure 3.2)	-	.908	.887	.092, *p = <.001*	372.961 (74), *p = <.001*
Adjusted 1 (Figure 3.3)	*CFI with ATA ATV on ATE DoR on AHL*	*.951*	*.937*	*.069, p = .01*	*231.874 (71), p = <.001*

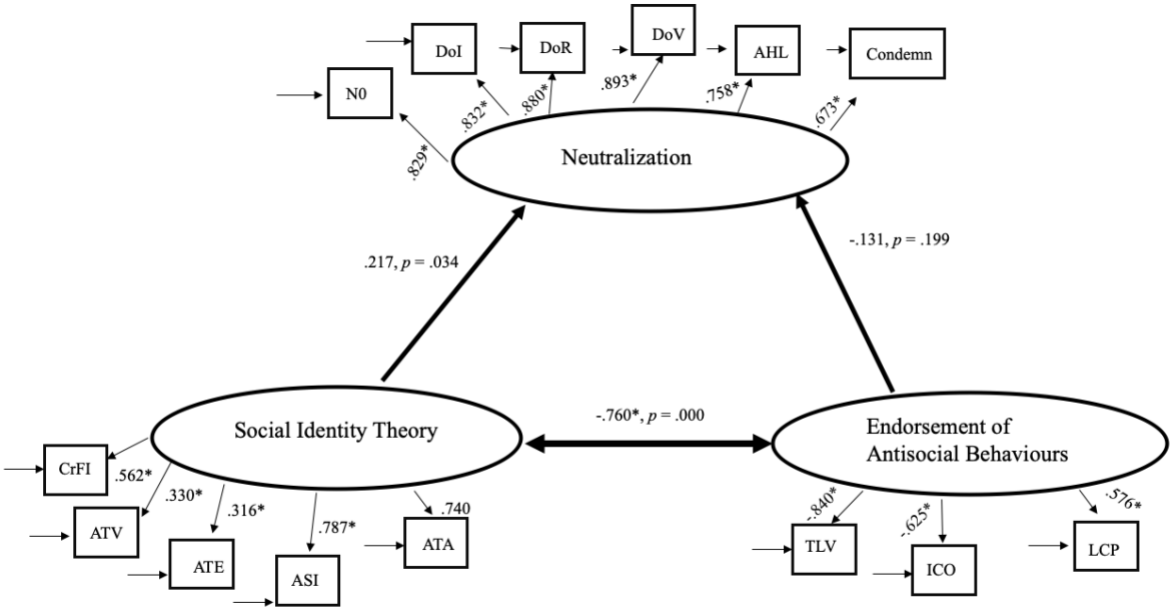
Italics indicate the model with the best fit

3.5.4.2 Texting while Driving with Parents.

The base model for texting while driving with parents (Figure 3.4) also resulted in a significant goodness-of-fit test, $\chi^2(74) = 322.500$, $p = <.001$, with the CFI and TLI both above the threshold at .921 and .903, respectively. The RMSEA did not indicate a good fit being above the threshold at .084, $p = <.001$.

Figure 3.4

Base Model for Parents and Texting while Driving

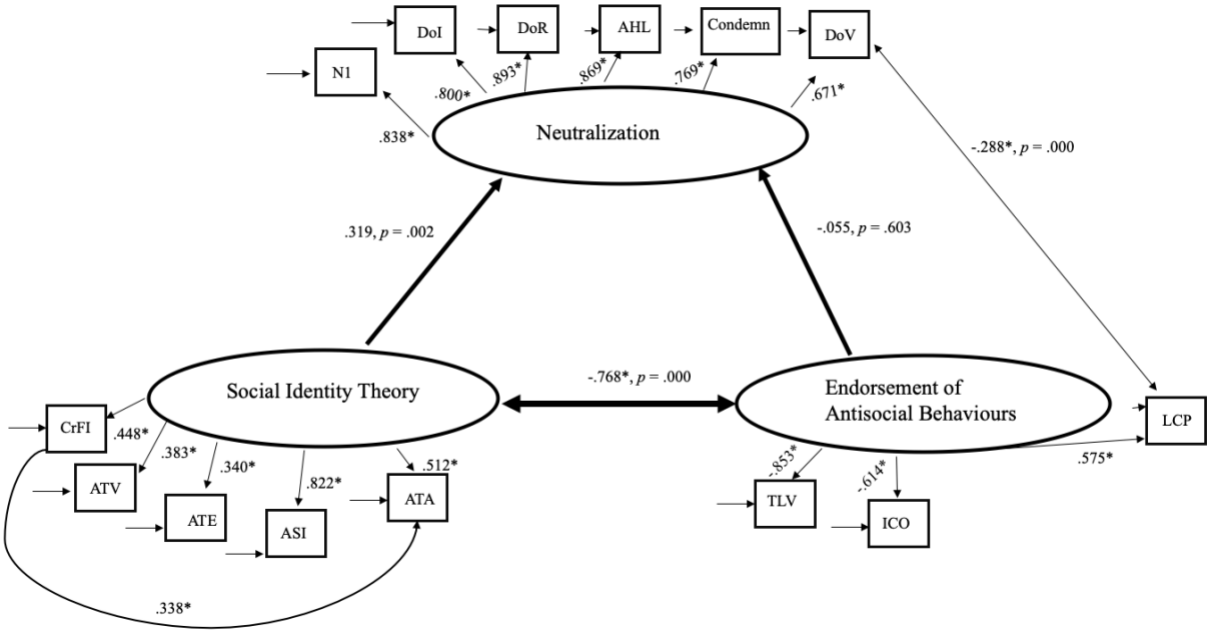


N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

Based on the modification indices, the base model was adjusted by adding a reciprocal relationship between LCP and Denial of Victim and the addition of the CrFI loading on ATA and Denial of Injury loading on Appeal to Higher Loyalties. These additions are theoretically sound and increased the fit across the CFI (.948), the TLI (.933), and the RMSEA (.070), however, the RMSEA remained above cut-off and indicated a poor fit, as shown in Table 3.15. The adjusted model indicated the best fit across the indices.

Figure 3.5

Adjusted Model for Parents and Texting while Driving



N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Polic

Table 3.15

Fit Indices for the Base and Adjusted Models for Parents Texting While Driving

Model	Paths Added / Removed	Comparative Fit Index	Tucker-Lewis Index	Root Mean Square or Error Approximation	Chi-Square (df), *p*
Base (Figure 3.4)	-	.921	.903	.084, *p = <.001*	322.500 (74), *p = <.001*
Adjusted (Figure 3.5)	*DoV with LCP, CFI on ATA, DoI with AHL*	*.948*	*.933*	*.070, p = <.001*	*236.893 (71), p = <.001*

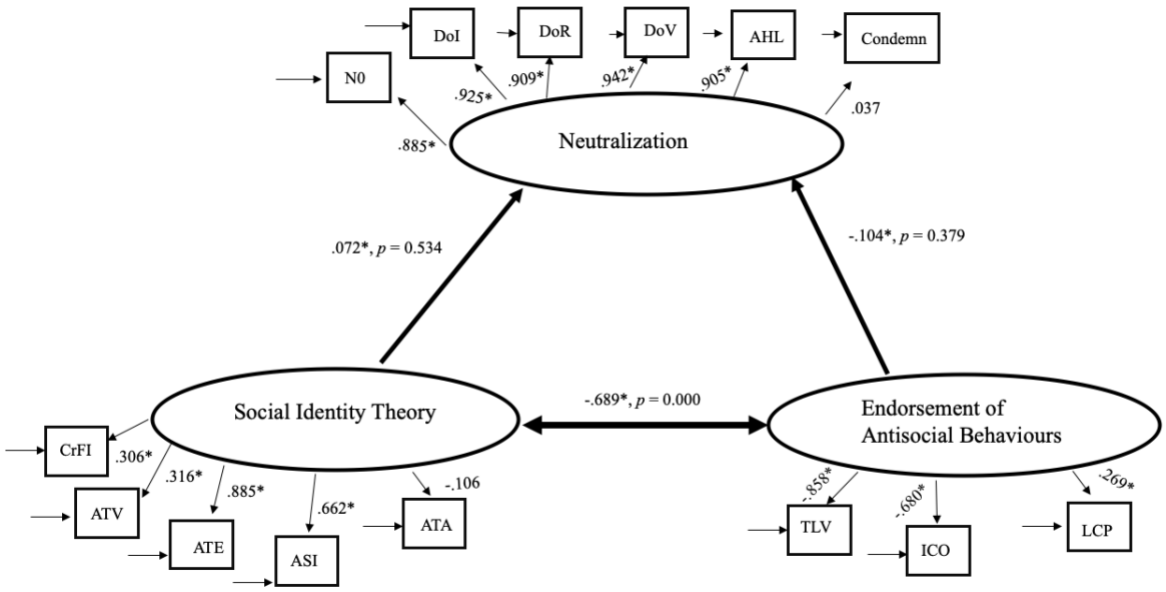
Italics indicate the model with the best fit

3.5.4.3 Recording or Photographing People in Public with Friends.

The base model for recording with friends (Figure 3.6) was significant, χ^2 (74) = 319.596, p = *<.001* as is shown in Table 21. However, the CFI was .875 and TLI was .846, which were below the cut-off and the RMSEA was .118, p = *<.001,* which was above the cut-off, thereby indicating no fit.

Figure 3.6

Base Model for Friends and Recording or Photographing People in Public



N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

Table 3.16

Fit Indices for the Base and Adjusted Models for Friends and Recording or Photographing Persons in Public

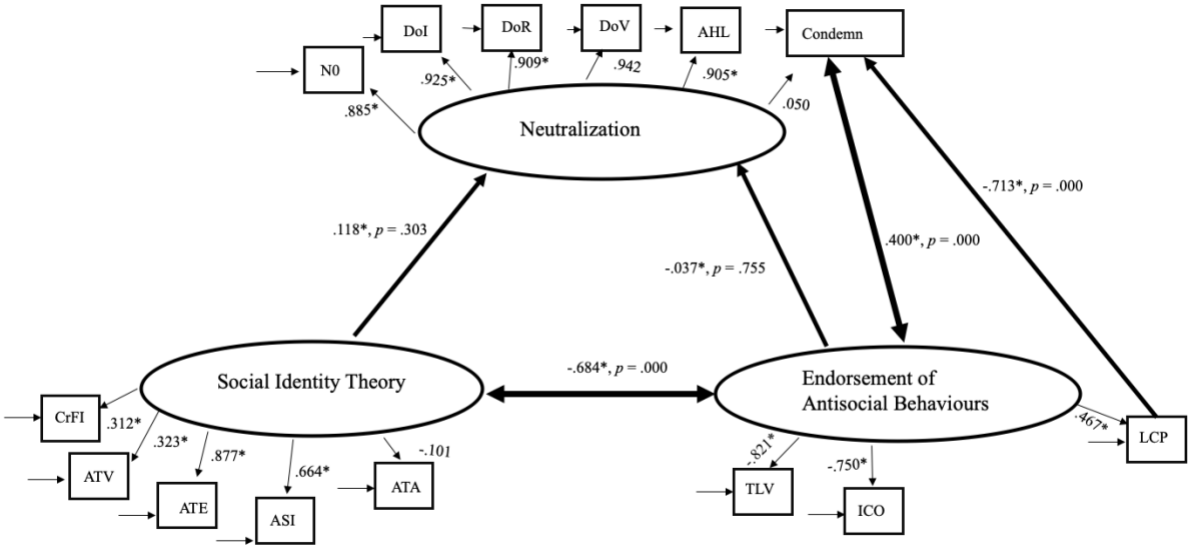
Model	Paths Added / Removed	Comparative Fit Index	Tucker-Lewis Index	Root Mean Square or Error Approximation	Chi-Square (df), *p*
Base (Figure 3.6)	-	.875	.846	.118, *p = <.001*	319.596 (74), *p = <.001*
Adjusted (Figure 3.7)	*LCP ON N6 N6 with F2*	*.959*	*.949*	*.068, p = .027*	*151.630 (72), p = <.001*

Italics indicate the model with the best fit

In examining the modification indices, an adjusted model was generated. Table 21 shows the fit indices for the base and both adjusted models with the paths added and removed. The adjusted model (Figure 3.7) for friends and recording included the addition of Condemnation of the Condemner being predicted by scores on LCP as well as a reciprocal relationship between Condemnation of the Condemner with the endorsement of antisocial behaviours. The χ^2 for the first adjusted model remained significant, $\chi^2(72) = 151.640$, $p = <.001$. However, the CFI and TLI increased above the threshold at .959 and .949, respectively, and the RMSEA decreased but not below the threshold at .068, $p = .027$.

Figure 3.7

Adjusted Model for Friends and Recording or Photographing People in Public



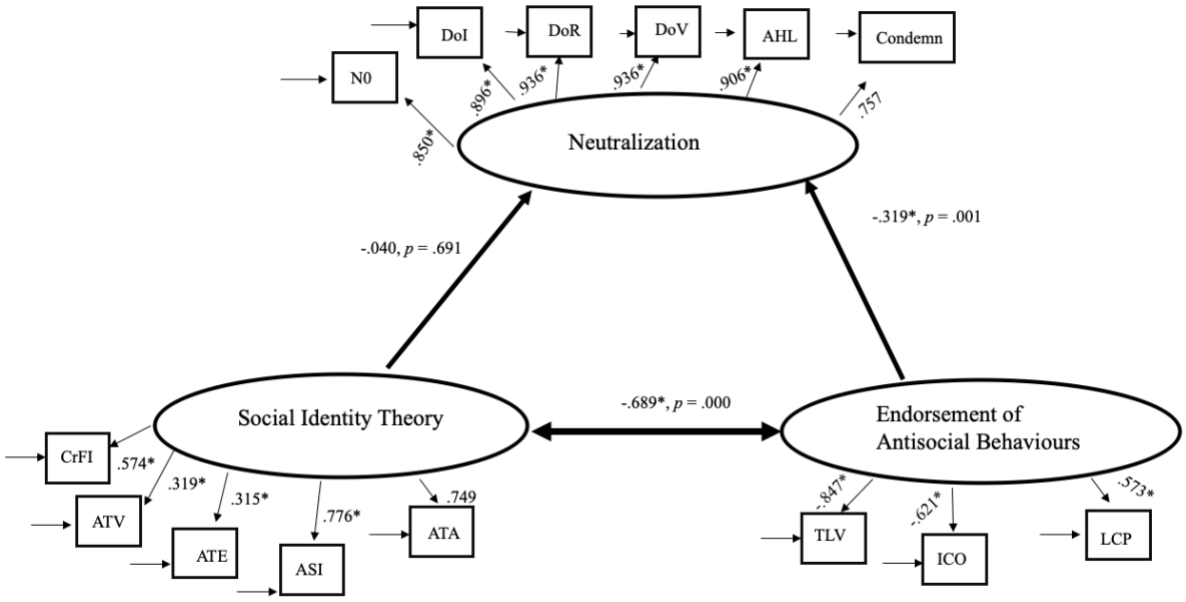
N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

3.5.4.4 Recording or Photographing People in Public with Parents.

The base model (Figure 3.8) for Recording with Parents resulted in a significant goodness-of-fit test, χ^2 (74) = 504.540, p = <.001. A CFI of .945, TLI of .932, and an RMSEA of .081, p = <.001, suggested a good fit according to the CFI and TLI but not the RMSEA. Based on modification indices, adjustments were made to generate the adjusted Model (Figure 3.9). Indices indicated that adding a reciprocal relationship between the CrFI and ATA and the loading of ATA on ASI would increase the fit of the model.

Figure 3.8

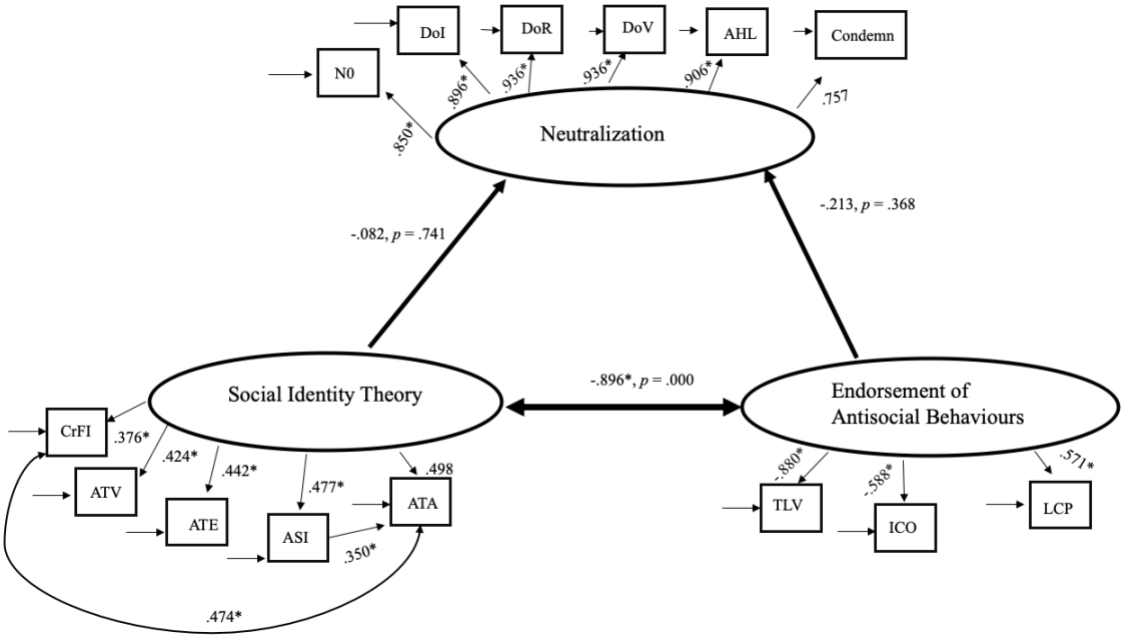
Base Model for Parents and Recording or Photographing people in Public



N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

Figure 3.9

Adjusted Model for Parents and Recording or Photographing People in Public



N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

The adjusted model had a significant goodness-of-fit test, χ^2 (72) = 210.223, p = <.0010, with a CFI of .967, TLI of .958, and an RMSEA of .063, p = .014, which all indicated a better fit than the base model. The modifications were also theoretically sound. Table 3.17 shows the fit indices for the base and adjusted models for Parents and Recording or Photographing in Public.

Table 3.17

Fit Indices for the Base and Adjusted Models for Parents Recording or Photographing people in Public

Model	Paths Added / Removed	Comparative Fit Index	Tucker-Lewis Index	Root Mean Square or Error Approximation	Chi-Square (df), *p*
Base (Figure 3.8)	-	.945	.932	.081, *p = <.001*	304.540 (74), *p = <.001*
Adjusted (Figure 3.9)	*CrFI with ATA ASI on ATA*	*.967*	*.958*	*.063, p = .014*	*210.223 (72), p = <.001*

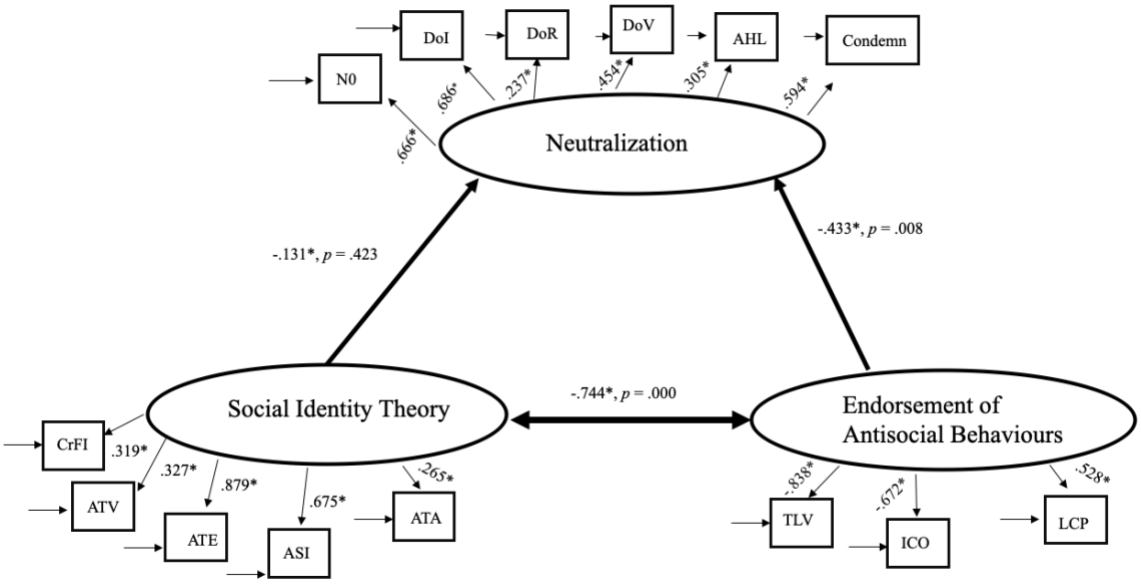
Italics indicate the model with the best fit

3.5.4.5 Physical Assault with Friends.

The base model for Physical Assault with Friends (Figure 3.10) also resulted in a significant goodness-of-fit test, χ^2 (74) = 233.054, p = <.001, but the CFI and TLI were both below the threshold with a value of .786, and .736, respectively. The RMSEA was above the threshold at .095, p = <.001, which indicated less than a good fit. Modification indices indicated adding a relationship where the Denial of Responsibility loads on Appeal to Higher Loyalties. The resulting model is shown in Figure 3.11.

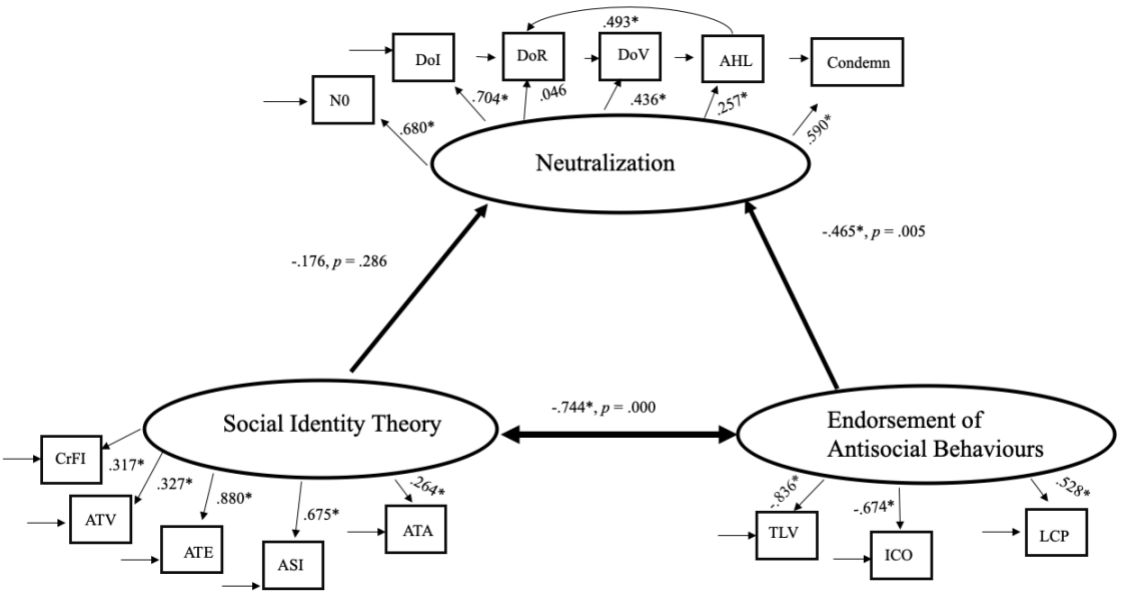
Figure 3.10

Base Model for Friends and Physical Assault



N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

Figure 3.11
Adjusted Model for Friends and Physical Assault



N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

While the χ^2 for the first adjusted model remained significant, $\chi^2(73) = 171.829$, $p = <.0010$, and the CFI and TLI increased to .867 and .834, respectively, they did not increase to above cut-off. Also, the RMSEA decreased to .075 but not below the cut- off, indicating a better fit than the base model, but not a good fit.

Table 3.18
Fit Indices for the Base and Adjusted Models for Friends Physical Assault

Model	Paths Added / Removed	Comparative Fit Index	Tucker-Lewis Index	Root Mean Square or Error Approximation	Chi-Square (df), *p*
Base (Figure 3.10)	-	.786	.736	.095, *p = <.001*	233.054 (25), *p = <.001*
Adjusted (Figure 3.11)	*AHL on DoR*	*.867*	*.834*	*.075, p = .003*	*171.829 (73), p = <.001*

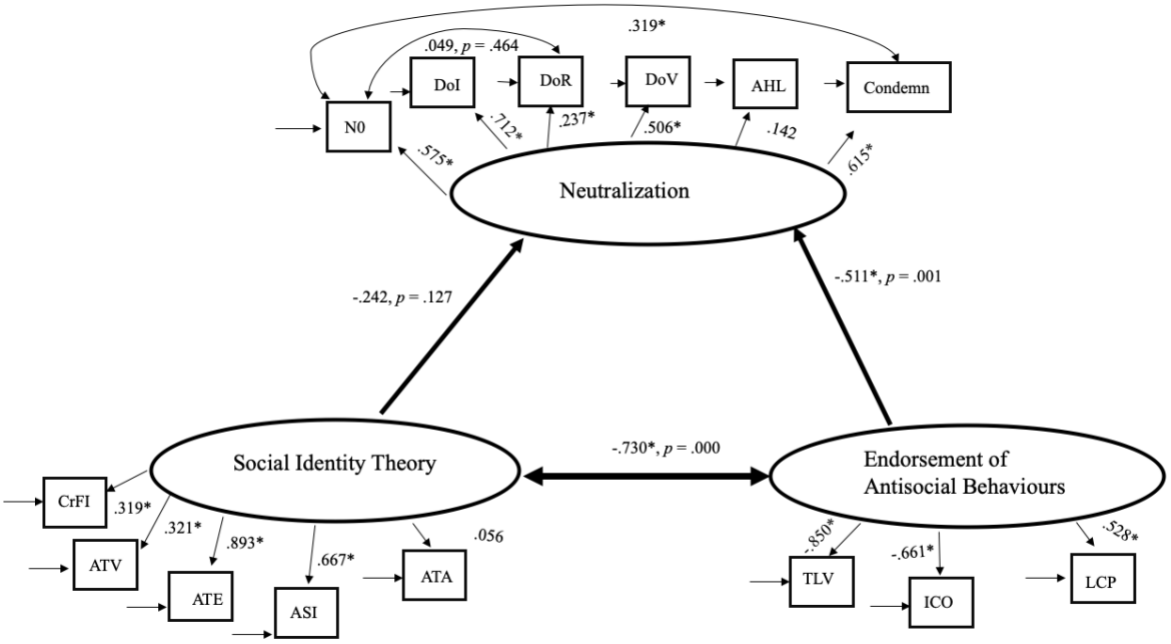
Italics indicate the model with the best fit

3.5.4.6 Physical Assault with Parents.

The proposed base model did not fit the data for Physical Assault with Parents. The model could not be generated because there was no convergence of the data. Modification indices indicated that adding reciprocal relationships between no neutralization and Denial of Responsibility as well as with no neutralization and Condemnation of the Condemner would generate a better fit. This model is shown in Figure 3.12. The Chi-square was significant, $\chi^2(72) = 261.923$, $p = <.001$, the CFI was .759, and the TLI was .696, both below cut-off indicating a poor fit. The RMSEA was .105, which was above cut-off and indicated a poor fit.

Figure 3.12

Adjusted Model 1 for Parents with Physical Assault



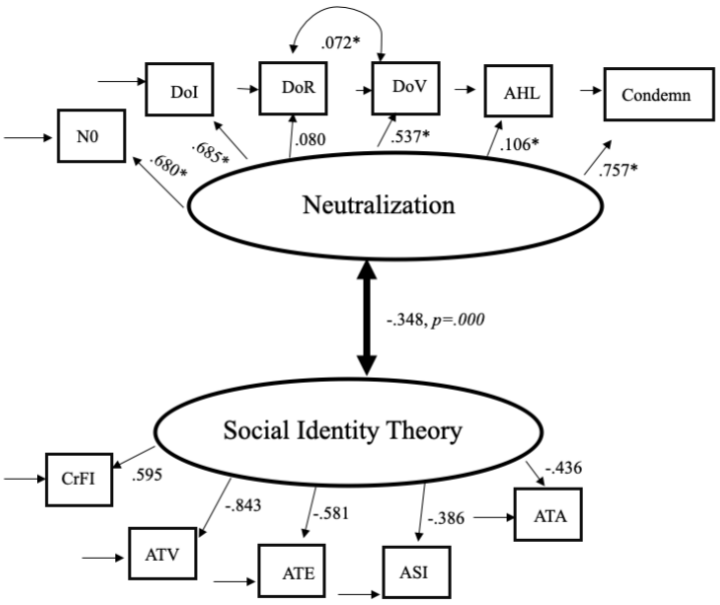
N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

Additional modification indices indicated the removal of the Endorsement of Antisocial Behaviours completely, and the addition of a reciprocal relationship between Denial of Victim and Responsibility. This model is shown in Figure 3.13. This adjusted model showed better fit

indices with a CFI of .926 and a TLI of .903. The RMSEA decreased to .065 and the Chi-Square remained significant as shown in Table 3.19. This second adjusted model had the best fit with the CFI and TLI, both indicating an increase above the cut-off, but the RMSEA was at the cut-off.

Figure 3.13

Adjusted Model 2 for Parents with Physical Assault



N0 = No neutralization; DoR = Denial of Responsibility; DoI = Denial of Injury; AHL = Appeal to Higher Loyalties; Condemn = Condemnation of the Condemner; DoV = Denial of Victim; CrFI = Criminal Friend Index; ATV = Attitudes towards Violence; ATE = Sentiments of Entitlement; ATA = Attitudes towards Associates; TLV = Tolerance of Law Violation; ICO = Identification with Criminal Other; LCP = Laws, Courts and Police

Table 3.19

Fit Indices for the Base and Adjusted Models for Parents Physical Assault

Model	Paths Added / Removed	Comparative Fit Index	Tucker-Lewis Index	Root Mean Square or Error Approximation	Chi-Square (df), *p*
Base	-	-	-	-	-
Adjusted 1 (Figure 3.12)	No neutralization and DoR and No neutralization and Condemn added	.759	.696	.105, *p = <.001*	261.923 (72), *p = <.001*
Adjusted 2 (Figure 3.13)	*Endorsement of Antisocial Behaviours removed DoR with DoV added*	*.926*	*.903*	*.065, p = .031*	*125.703 (42), p = <.001*

Italics indicate the model with the best fit

As shown in Tables 3.18 and 3.19, the parents base model had a better fit than the friends base model. However, the adjusted model for friends had the best fit, which supports hypothesis five which states that the model for texting while driving with friends will have a better fit than the model of texting while driving with the valued group of parents. Additionally, according to hypothesis five, there would be no difference in fit across friends and parents for the behaviours of recording or photographing persons in public and physical assault and, consistent, with the hypothesis, there was no support found. Instead, the results indicated there were differences between the valued groups of friends and parents for both recording or photographing persons in public and physical assault. As is shown by Tables 3.16 to 3.19, there were differences in fit across the valued groups of parents and friends for the legal and normed behaviour of recording and the illegal and not normed behaviour of physical assault. Additionally, Table 3.20 shows that there is a difference in the fit for the base model across the behaviour of recording and texting while driving as was predicted in hypothesis five. There was no support for hypothesis six which stated that there would be no difference in fit across texting while driving and physical assault for both valued groups of friends and parents.

Table 3.20
Fit Indices for the Base Models for all Behaviours and Valued Groups

Behaviour	Group	Comparative Fit Index	Tucker-Lewis Index	Root Mean Square or Error Approximation	Chi-Square (df), *p*
Recording	Friends	.875	.846	.118, p = <.001	319.596 (74), *p = <.001*
Recording	Parents	.945	.932	.081, p = <.001	304.540 (74), *p = <.001*
Texting while Driving	Friends	.908	.887	.092, p = <.001	372.961 (74), *p = <.001*
Texting while Driving	Parents	.921	.903	.084, p = <.001	322.500 (74), *p = <.001*
Physical Assault	Friends	.786	.736	.095, p = <.001	233.054 (74), *p = <.001*
Physical Assault	Parents	-	-	-	-

Hypothesis 7 proposed that there would be less fit with physical assault than with texting while driving within both valued groups of friends and parents. There was less fit with physical assault compared to the other two behaviours and the base model did not fit for physical assault. As shown in Table 3.20, the best fit model with parents was the legal behaviour while the best fit with friends was texting while driving. Hypothesis 7 was supported by the base models in Table 3.20 for both valued groups.

3.5.5 STRUCTURAL EQUATION MODEL OVERALL RESULTS

All the base models include the reciprocal relationship between Social Identity Theory and the Endorsement of Antisocial Behaviours. This reciprocal relationship is consistently an inverse one. This is due to the relationship between the measures used to operationalize the constructs. Social identity theory was operationalized by the MCAA, while the endorsement of antisocial behaviours was operationalized by the CSS. Higher scores on the CSS indicate more prosocial behaviour, while higher scores on the MCAA indicate more antisocial behaviour. The inverse relationship was therefore expected since it is indicating that as prosocial behaviour increases, antisocial behaviour decreases and vice versa. The relationship between the

endorsement of antisocial behaviours and neutralization was inverse and is unsurprising because it shows that the more prosocial the behaviour, the lower the use of neutralization. The relationship between social identity and neutralizations is a direct one for texting while driving with friends and parents, recording in public with friends. However, the relationship between social identity and neutralization was an inverse one for recording in public with parents and physical assault with friends. This direct relationship indicates that as antisocial behaviour increased, the use of neutralizations increased. The inverse relationship between recording in public with parents and physical assault with friends is surprising given that it suggests that as antisocial behaviour increased, there was a decrease in neutralization specific to the behaviours and those valued groups. The same trend was noted for the adjusted models as well except for physical assault with parents.

CHAPTER 4: DISCUSSION

The purpose of the current study was to investigate a multifaceted explanation of antisocial behaviour that involves an individual considering situational variables in determining his or her behaviour. To do this, the Theory of Planned Behaviour (Ajzen, 1991), Social Identity Theory (Hogg, 2006), Techniques of Neutralization (Sykes & Matza, 1957), and Cognitive Dissonance (Festinger, 1957) were included in an explanation where situational variables, specifically behavioural type, valued group, and neutralizations, were manipulated. There were three types of behaviour examined: (a) legal and normed, (b) illegal and normed, and (c) illegal and not normed. There were two types of valued groups examined: (a) parents, and (b) friends. There were six types of neutralizations examined: (a) none; (b) Denial of Responsibility; (c) Denial of Injury; (c) Denial of Victim; (d) Condemnation of the Condemner; and (f) Appeal to Higher Loyalties.

This study included two phases of data collection as recommended by Ajzen (1991) when working with the Theory of Planned Behaviour. The first phase involved understanding the antecedents of the specific behaviours according to the theory. Specifically, the antecedents for behaviour are the attitudes towards the behaviour, subjective norms, and perceived behavioural control, as well as the groups that would value (approve/disapprove or endorse/not endorse) the behaviour, referred to as valued groups. Valued groups are considered a background factor in the Theory of Planned Behaviour (Ajzen, 1991), and this variable was derived from Hogg's (2006) Social Identity Theory, which explains how group membership and identity influence individual behaviour. This first phase included an investigation into how young adults rate and describe the following specific behaviours: (a) recording or photographing persons in public; (b) sexting in a consensual relationship; (c) texting while driving; (d) illicit drug use; (e) physical assault; and (f) breaking and entering.

The findings from phase I were used to develop the scenarios in phase II and these scenarios included the previously mentioned behavioural types, valued groups, and

neutralizations and involved asking respondents to indicate the level of acceptability of the described behaviour in each scenario. The first goal of phase II was to examine whether antisocial behaviours are enacted because of situational factors and whether a person can possess both prosocial and antisocial attitudes, which can be enacted depending on the situational variables of neutralizations, behaviour type, and valued group. The second goal of phase II was to examine modeling with the Criminal Sentiment Scale (Andrews & Wormith, 1984), Measures of Criminal Attitudes and Associates (Mills & Kroner, 1999), and Techniques of Neutralization (Sykes & Matza, 1957). The model would help to investigate whether the Social Identity theory (Hogg, 2006), Techniques of Neutralization (Sykes & Matza, 1957), and Theory of Planned Behaviour (Ajzen, 1991) can explain the enactment of antisocial behaviour. The results support several of the hypotheses, which are described below, as are the implications of these findings.

4.1.1 How do young adults rate and describe the specific behaviours?

According to Ajzen (1991) and Skrzypiec (2015), the Theory of Planned Behaviour is only as useful for understanding behaviour as the specific understanding of the attitude towards the behaviour, the subjective norm, and the perceived behavioural control about the behaviour. The findings of phase I add to our understanding of the following specific antisocial behaviours: (a) texting while driving; (b) illicit drug use; (c) physical assault; and (d) breaking and entering. These findings add to the existing literature that has included the examination of specific antisocial behaviours including men's intention to abuse women (Tolman at al.,1996); cheating on a test, shoplifting, and lying to get out of assignments (Beck & Ajzen,1991); cheating justifications and academic misconduct (Stone at el., 2009); and substance use and abuse (Conner & McMillan, 1999; Fishbein et al., 2002; Lucidi et al., 2008; Orbell et al., 2001). Additional antisocial behaviours that have been examined using the Theory of Planned Behaviour (Ajzen, 1991) include the intention to use marijuana (e.g., Ajzen et al., 1982), smoke cigarettes (e.g., Godin et al.,1992), consume alcohol (e.g., Morojele & Stephenson, 1994; Schlegel et al., 1992), intention to commit driving and traffic offences (Parker et al., 1995), and intentions to reoffend (Kiriakidis, 2008), to name a few. The phase I findings have therefore added to the literature in terms of understanding antisocial behaviour by revealing the antecedents of the specific behaviours. This is important given that Beck and Ajzen (1991) stated that the understanding and prediction of antisocial behaviour is more difficult than prosocial behaviour, given that the cognitive load and process is more complex than the cognitive load and

process for prosocial behaviour. Additionally, given the increased complexity of the cognitive load and process for antisocial behaviours, expanding the Theory of Planned Behaviour (Ajzen, 1991) to include factors that may enhance our understanding of antisocial behaviour is logical (Beck & Ajzen, 1991). The findings of phase I allow for further investigation of antisocial behaviours but also have the added benefit of exploring additional variables in the Theory of Planned Behaviour.

Despite the calls for the retirement of the Theory of Planned Behavior (Ajzen, 1991), the current findings indicate that the Theory of Planned Behaviour remains an effective theory for investigating behaviour and is easily modifiable. Specific to this study, the addition of Social Identity Theory (Hogg, 2006) and Techniques of Neutralization (Sykes & Matza, 1957) to the Theory of Planned Behaviour (Ajzen, 1991) suggests that when enacting antisocial behaviours, the complexity of enacting antisocial behaviours as described by Beck and Ajzen (1991) does in fact exist. One implication of these findings is that more work needs to be done to unravel the complexity of antisocial behaviour and by extension offending behaviour. For example, this study used the valued group, which could be considered a background factor in the Theory of Planned Behaviour (Ajzen, 1991), specifically an environmental one. However, in this study, it was developed using the Social Identity Theory (Hogg, 2006), since the environmental factors listed did not include valued groups. Other possible variables could be investigated based on the theoretical framework of this study.

Another implication of the findings from the elicitation phase is the elucidation of group membership in that group values influence individual values and by extension behaviour. Specific to offending behaviours, or as Tafrate et al. (2018) refer to offending populations, Justice-Involved Clients (JIC), the finding that group membership and values influence individual behaviour adds to the literature supporting the Risk-Need-Responsivity (RNR) model (Andrews et al., 2006; Bonta & Andrews, 2007). This indicates that antisocial associates are a risk factor. However, unlike the RNR model (Andrews et al., 2006; Bonta & Andrews, 2007), the findings indicate that antisocial associates as a risk factor but additionally explains this as being due to group membership. That is, antisocial associates is a risk factor because of group membership with antisocial associates and therefore the group values of the antisocial associates, not innate individual values or personal tendencies (Tafrate et al., 2018). This is an important distinction because it suggests that intervention and prevention are possible not through

individual changes in values but through the shifting of the value of the group to the individual, effectively changing group membership and social identity.

4.1.2 Are antisocial behaviours enacted as a result of situational factors?

Consistent with the hypothesis that antisocial behaviours are enacted as a result of situational factors, the acceptability of antisocial behaviour changed with the type of behaviour depicted in the scenario, the valued group, and the presence of neutralization. There was a significant interaction of behaviour with the group, behaviour with neutralization, and group with neutralization, as well as a behaviour x group x neutralization interaction. These results, therefore, indicate that the acceptability of the behaviour is influenced by the interaction of the situational variables.

There were significant differences across all groups and behaviours except the behaviour of texting while driving with the valued group of friends and the behaviour of physical assault with the valued group of friends. This lack of significant difference across texting while driving and physical assault with the same valued group of friends, especially when texting while driving was normed to the friend group, suggests that there is something unaccounted for between the behaviour of texting while driving and physical assault apart from norming and legality. While this study did not focus on the investigation of offending behaviours directly, the legal/illegal factor of the behaviours indirectly allows for the investigation of how an expected prosocial sample would rate the enactment of illegal behaviour as acceptable. Based on these findings, the answer to whether antisocial behaviours are enacted as a result of situational factors is that antisocial behaviours are enacted as a result of the behaviour being normed to a valued group. This valued group formed the basis of how the neutralization is feasible, thereby making it acceptable to endorse, and according to the Theory of Planned Behaviour (Ajzen, 1991), acceptable to enact the behaviour. This begs the question then of whether there are circumstances, or other situational variables to consider that would allow for antisocial behaviour. Also the consideration of whether physical assault is normed to the friends group and under which circumstances.

The interaction of behaviour and neutralization indicated that there were significant differences in the acceptability ratings across all of the behaviour-neutralization pairings except for the neutralization of Denial of Responsibility, which was not significantly different for the behaviours of texting while driving and physical assault. This indicates that the behaviours of

texting while driving and physical assault were considered similar in terms of the use of the neutralization type of Denial of Responsibility. Implications of this finding are that when the neutralization of Denial of Responsibility is being used by an individual, the norming or the legality of the behaviour is not distinctly different and the endorsement of an illegal, not normed behaviour is possible. This makes theoretical sense because if the individual does not believe the responsibility for the behaviour is his or hers, then there is no perceived accountability for the behaviour and as such the behaviour is endorsed and enacted. The idea that without accountability or responsibility for the behaviour an individual is likely to enact the behaviour also suggests ways to intervene or prevent behaviours by increasing either the responsibility or the accountability for enacting behaviours. Therefore, the degree of responsibility and accountability for the behaviour other than existing sanctions should be investigated. Considering this finding with that of the non-significant difference between the behaviour-valued group pairing of friends for both texting while driving and physical assault, the implication is that the norming and legality of the two behaviours are not being considered when deciding to endorse or not to endorse a behaviour. This is further verified by the significance of the 3-way interaction that shows that the interaction of behavioural type (legality and norming) with the valued group and with neutralization is significant.

The interaction of group and neutralization was also significant across the pairings of valued group and neutralization except for no neutralization with friends and parents. This finding indicates that when there is no neutralization mentioned in the scenario, the behaviour is not reflective of group membership thereby indicating that the presence of the neutralizations of Denial of Responsibility, Injury, Victim, Condemnation of the Condemner, and Appeal to Higher Loyalties reinforce the saliency of the valued group described in the scenario. An implication of this finding for enacting antisocial behaviour is the necessity of both the neutralization and the valued group identity, and by extension group membership and values, to be salient at the time of the behaviour and therefore the enactment of the behaviour.

Finally, the 3-way interaction of behaviour, group, and neutralization showed that all combinations of the independent variables were significantly different in their acceptability ratings except for two comparisons. Specifically, friends and Denial of Victim were not significantly different across the behaviours of recording and physical assault, and parents and Denial of Responsibility were not significantly different across the behaviours of recording and

physical assault. These were surprising findings given that for both exceptions, the behaviours are opposites for the characteristics of norming and legality. The first specific combination of valued group, behaviour, and neutralization that was not significant indicates that the neutralization of Denial of Victim is only considered with ambiguous behaviours. Ambiguous behaviours in this case would refer to behaviours that are normed to one or some of the individual's valued groups but not to other valued groups or are illegal but normed to a valued group. Additionally, this finding indicates that Denial of Victim does not make sense in the legal and normed behaviour of recording or photographing persons in public because the behaviour can have no victim as it is both legal and normed. On the other hand, denying a victim in physical assault is impossible because someone was assaulted and therefore a victim must exist, making the neutralization of Denial of Victim, not a consideration when deciding to enact or not enact physical assault, or any behaviour in which a victim is implicit in the behaviour.

The non-significant findings for the valued group of parents with the neutralization of Denial of Responsibility across the two polar opposite behaviours of recording or photographing persons in public and physical assault indicates that there is no need to be responsible for a normed and legal behaviour. It also indicates that for illegal and not normed behaviour someone has to be responsible, therefore, the Denial of Responsibility is not an applicable neutralization. These two findings indicate that depending on the valued group that is salient and the behaviour being considered, different neutralizations are used. The implication of this is that identifying which neutralizations are used has the potential to inform how to intervene with antisocial behaviours, especially depending on the valued group. For example, for this sample, Denial of Responsibility and Denial of Victim were most significant with texting while driving which is illegal but normed with parents and friends, respectively. To intervene with texting while driving or an illegal but normed behaviour, the neutralization of Denial of Responsibility and Victim would have to be addressed. Intervening with the specific neutralization being used would require interventions that include cognitions to change behaviour. This has implications for treatment, intervention, and prevention of antisocial behaviours, that is, intervening by changing cognitions, specifically neutralizations.

According to Tafrate et al. (2018), criminal thinking and antisocial orientation have to be considered when intervening with Justice-Involved Clients. Criminal thinking (Tafrate et al., 2018) is a term that encompasses specific cognitions that is, thoughts, attitudes, beliefs, and

maladaptive thinking styles. Antisocial orientation (Tafrate et al., 2018) on the other hand, reflects what Tafrate et al. (2018) refer to as a "broad range of personal tendencies such as feelings, behaviours and ways of interacting with others" (pg. 17). Tafrate et al. (2018) further explain that entrenched criminal thinking tends to underly an antisocial orientation. An interesting implication of the findings of this study is what Tafrate et al. (2018) refer to as personal tendencies is actually social identity, which is reflective of group membership and therefore the values of the group. As a result, the antisocial orientation would be a broad range of valued groups' values that are enacted by the individual when the valued group is made salient. Similar to the RNR model (Andrews et al., 2006; Bonta & Andrews, 2007), a risk reduction model is posited by Tafrate et al. (2018) when working to intervene and change the behaviour of Justice-Involved Clients. Risk reduction strategies are used to prevent antisocial and offending behaviour as well as reduce risk (Tafrate et al., 2018). More specifically, Cognitive-Behavioural Therapy (CBT) is indicated (Fordham et al., 2018; Tafrate et al., 2018) as the mode of intervention to change thinking or cognitions and thereby change behaviour. CBT is a therapy that is used to improve the well-being of individuals. It is based on the theory that the relationships between cognition, behaviours, and physical responses are all reciprocal (Fordham et al., 2018). This is consistent with the framework of this study and therefore presents a mode of intervention with or prevention of antisocial behaviour that addresses the cognitions specific to the neutralization, which are being used to allow for the enactment of antisocial behaviour. Based on the findings in this study, a prosocial population does not use Denial of Victim or Responsibility with physical assault therefore these neutralizations would not be a good point of intervention. It is important to tailor interventions with individuals using the risk, need, and responsivity principles within the RNR model (Andrews et al., 2006; Bonta & Andrews, 2007). The risk and responsivity principles (Andrews & Bonta, 2010) indicate the importance of matching intervention intensity with the risk of enacting the behaviour, while the responsivity principle indicates that the intervention needs to be accessible to the justice-involved clients and as a result, there are several factors to consider when designing interventions for individuals. The need principle indicates that it is important that the intervention address the individual's risk factors. As a result, the RNR model indicates the need for a tailored intervention with justice-involved clients (Tafrate et al., 2018).

Additionally, Mitchell et al. (2018) have described chronic criminal behaviour as a lifestyle disorder that accumulates over time and reflects Sykes and Matza's (1957) *hardening process*, which indicates that with practice neutralization eventually becomes automatic, eventually making the neutralization more difficult to identify and change. As a result, early intervention and prevention are important with antisocial behaviour. In keeping with the need principle of the RNR framework (Andrews et al., 2006; Bonta & Andrews, 2007) and Tafrate's et al. (2018) position on intervening with justice-involved clients, it is important to tailor treatment to the individual. This study provides additional factors that should be considered when tailoring an intervention, specifically, the neutralizations or cognitions that the individual uses, the valued groups and social identity, and the norming of the behaviours to these valued groups. According to Tafrate et al. (2018), levels of cognition are important in a CBT intervention since CBT operates at the intermediate and automatic levels of cognition. The intermediate level of cognition refers to the attitudes, beliefs, and assumptions that an individual holds, which therefore determines how the individual behaves across different situations (Tafrate et al., 2018). Automatic levels of cognition on the other hand are quick responses and form the stream of consciousness of the individual (Beck, 2011). Criminal thinking exists at the automatic and intermediate levels of cognition and CBT operates at both the intermediate and automatic levels of cognition. It is therefore viable to use CBT to address neutralization as a method of intervening with individuals who enact antisocial behaviours.

As previously indicated, the dispositional explanation of antisocial behaviour is most prevalent in the literature. However, the General Personality and Cognitive Social Learning perspective of criminal behaviour (Andrews & Bonta, 2006) includes both dispositional and situational elements. According to the General Personality and Cognitive Social Learning the dispositional factors that influence both the individual and the situation include the family of origin, neighbourhood proportion of active criminals, gender, age, temperament, self-management ability, socialization, and ethnicity. According to Andrews and Bonta (2003), there are multiple ways in which an individual can get involved in crime, but antisocial attitudes and criminal associates are very strong risk factors. This is consistent with the findings of this study. However, in contrast to the General Personality and Cognitive Social Learning, this study indicated that situational variables explain antisocial behaviour. This is important because the sample scored in the norm ranges of prosocial groups for the Criminal Sentiments Scale

(Andrews & Wormith, 1984) as well as on the Measure of Criminal Attitudes and Associates (Mills & Kroner,1999), which indicates that the sample in this study was prosocial. However, the participants also indicated that texting while driving was more acceptable than physical assault and less acceptable than recording in public, indicating that this is likely due to the norming of texting while driving. This result highlights the value of antisocial associates in enacting antisocial behaviour. Antisocial associates are a recognized risk factor according to the RNR model (Andrews et al., 2006; Bonta & Andrews, 2007). As previously indicated, this is a viable intervention pathway with the RNR model (Andrews, Bonta, & Wormith, 2006). What is of importance here is the overarching theory for the RNR model, which is the General Personality and Cognitive Social Learning perspective of criminal behaviour (Andrews & Bonta, 2006).

There are three aspects of the General Personality and Cognitive Social Learning perspective (Andrews & Bonta, 2006), and they are: (a) a personality predisposition and the learning of criminal behaviour based on the consequences of those behaviours, which is similar to the Theory of Planned Behaviour (Ajzen, 1991) in terms of evaluating the behaviour before acting; (b) a cognitive aspect in that it is expected that there is an evaluation of the behaviour in that pro-criminal attitudes and beliefs are proposed to have a higher value and as such result in pro-criminal behaviours; and (c) a social learning aspect that highlights the importance of learning from the valued others in the individual's life. The personality predisposition suggests that a person who enacts offending behaviour has a personality predisposition to do so, which is a dispositional explanation. The cognitive aspect assumes a value system in which pro-criminal attitudes are more valuable and points to the dispositional explanations of the general personality aspect. The social learning aspect of the perspective refers to the only aspect that is not dispositional and indicates that the individual learns from social contacts. These social contacts, also known as important others, can be friends, parents, family, or any person that is valuable and has contact with the individual. Based on the personality predisposition and the cognitive aspect, there is an expectation that persons who would endorse the enactment of illegal behaviours should have a predisposition and a value system and social contacts that would score closer to offender scores on the Criminal Sentiments Scale (Andrews & Wormith, 1984) as well as on the Measure of Criminal Attitudes and Associates (Mills & Kroner,1999). However, the findings of this study indicate that it is possible to enact antisocial behaviours without having the disposition to do so.

The GPCSL (Andrews & Bonta, 2003) indicated demographic factors to be dispositional factors that play a role in the route to crime. Demographic information is collected and assumed to be indicative of innate, dispositional features when in fact demographic information such as race, ethnicity, gender, and age tend to be proxy variables for situational variables. More specifically, different races, ethnicities, genders, and ages are socialized differently; that is, experience different situational variables and as a result, those seemingly dispositional variables are proxy variables for situational variables.

One implication of these findings for the theories used in this study is that the combination of Theory of Planned Behaviour (Ajzen, 1991) and Social Identity Theory (Hogg, 2006) with Techniques of Neutralization (Sykes & Matza, 1957) offers a further elucidation of antisocial behaviours. It also indicates that the Theory of Planned Behaviour remains a viable theory for understanding and predicting behaviour including antisocial behaviours with the addition of variables as well as other theories. Additionally, the findings indicate that the Techniques of Neutralization (Sykes & Matza, 1957) was a useful addition to the multifaceted explanation proposed in this study, which is noteworthy given that the Techniques of Neutralization is over 50 years old. The use of Techniques of Neutralization (Sykes & Matza, 1957) suggests that this theory is also useful for enhancing our understanding of antisocial behaviour and not only with youth as it was initially conceptualized. The finding indicates that antisocial behaviour is enacted as a result of the individual considering the situational variables.

4.1.3 Can individuals possess both antisocial and prosocial value systems which are enacted based on situational factors?

There was support for individuals being able to possess both antisocial and prosocial value systems which are enacted based on situational factors. With the use of modelling, specifically structural equation modelling, it was possible to determine whether the models of behaviour in which situational variables of behavioural type, valued group, and neutralization exist empirically. The models fit the data for legal and normed behaviour of photographing or recording persons in public for both valued groups of friends and parents, as well as for the illegal and normed behaviour of texting while driving for both valued groups, and finally for the illegal and not normed behaviour of physical assault for friends but not for parents. The fit of the model indicates how well the proposed model is found empirically in the data.

Specific to texting while driving, the base model with parents as the valued group had a better overall fit than with friends as the valued group. This suggests that the proposed model is more likely to exist with parents than with friends. However, when the models were adjusted, the models for friends and texting while driving had the overall best fit. The importance of whether the base model or an adjusted model had the best fit indicates whether the data reflect the base or proposed model or the adjusted model. That is, does the real-world mechanism exist as proposed or with some modifications? Given that the behaviour was normed to the friend group, this difference in fit suggests that the proposed model does not fit the data and as such the relationships between the variables are not as proposed for the groups or behaviour. This is why when the modification indices were taken into account, specifically, when a reciprocal relationship was added between the criminal friends index and Antisocial Associates as well as one between Attitudes towards Violence and Entitlement and also a relationship between the Denial of Responsibility and Appeal to Higher Loyalties, the fit passed the threshold and became a good fit. The findings were similar for texting while driving with parents. The implication is that with each shift in the valued group and behavioural type, the model of how the behaviour is endorsed or enacted changes and with it how the mechanism works. Specifically, for texting while driving with friends, the criminal friends index and Antisocial Associates were very closely related, that is the criminal friends index predicted Antisocial Associates which in turn predicted the criminal friends index and the same between Attitudes towards Violence and Antisocial Intent. However, the relationships between the variables were different for parents and indicate that depending on the valued group, the relationship between the variables are different and therefore the mechanisms differ. The implication is that no behaviour is enacted the same way across the situational variable of the valued group.

The parents model for texting while driving as proposed did have a good fit but when additional relationships between the Denial of Victim and Laws, Courts, and Police as well as the criminal friend index and Antisocial Associates and Denial of Injury with Appeal to Higher Loyalties were added, the fit got stronger. Therefore, the models fit the data but not as proposed. However, the addition of relationships between the criminal friends index and Antisocial Associates and another between Attitudes towards Violence and Entitlement are not counter to the idea that behaviour is enacted as a result of situational variables. The criminal friends index and Antisocial Associates are similar, as are Attitudes towards Violence and Antisocial Intent

therefore adding these relationships both theoretically and empirically strengthened the model. The same can be said for the parents model. The difference in terms of which relationships were added to the model for parents versus those for friends is additionally informative in that for the parents model, relationships were added between neutralization and aspects of the Criminal Sentiments Scale and Measure of Criminal Attitudes and Associates, which indicates that the behaviour is less normed to the parents group. This provides further support for the evaluation of social group membership in enacting behaviours.

The base model is the proposed model and the fact that the adjusted models had a better fit indicates there is more work to be done to truly understand the antecedents of these behaviours and by extension all antisocial behaviours. There were differences between the models for the other two behaviours across the two valued groups. Importantly, the proposed models did not have the best fit for any of the behaviours of the valued group. There were differences in fit across all models and valued groups for all behaviours. An interesting finding when comparing the six best-fit models was that the overall best fit was seen for the legal and normed behaviour of recording or photographing people in public, followed by the illegal and normed behaviour of texting while driving, and finally, physical assault, which is reflective of the behavioural types of legal and normed, illegal and normed, and illegal and not normed. Also, the six best-fit models needed more modifications to the base model when moving from legal and normed to illegal and normed and finally to illegal and not normed. This suggests that the proposed models differed depending on the legality and norming of the behaviour, which was not considered when designing the current study, but is in keeping with the hypothesis that the behaviours are considered differently by the individual depending on the norming and legality of the behaviour.

If a prosocial group of respondents can accept the enactment of both legal and illegal behaviours due to norming to a valued group and the use of neutralization techniques to resolve cognitive dissonance, then it means that an individual can possess both antisocial and prosocial attitudes. One implication of an individual being able to possess both antisocial and prosocial attitudes is that there is evidence that all individuals are impacted by their cognitions and therefore experience guilt and by extension regret for their behaviour. Effectively, this study provides evidence that cognitive and attitudinal processes are consistent across individuals, whether they endorse and enact prosocial or antisocial or offending behaviour. This indicates that

interventions with individuals who enact antisocial behaviour can be effective if situational factors are targeted, such as addressing subjective norms related to group membership or changing the value of the group membership. It may also mean a shift in approach in terms of the judicial system and may support the use of more extrajudicial measures that target situational factors. An example of this could be supporting social services to ensure that individuals are not at risk of becoming a member of a group that endorses the enactment of illegal activity as a social identity.

The second implication of individuals possessing both antisocial and prosocial attitudes is that they are enacted based on situational factors which indicate verification that antisocial behaviour could have more complex cognitive processes when being considered in terms of the acceptability of enacting them. That is, antisocial behaviour is a more cognitively complex process than prosocial behaviour. This implication supports the proposition that antisocial behaviours have more complex antecedents than prosocial ones (Beck & Ajzen, 1991).

The findings indicate that individuals can possess both antisocial and prosocial value systems that are enacted based on situational factors. Even though these findings are supportive of the hypotheses and have implications for how to intervene with, or prevent, antisocial and offending behaviour, it is important to recall that this is only one study, therefore the limitations, as well as possible future studies are reviewed below.

4.2 LIMITATIONS

There were limitations to both phases of the study. Specific to the elicitation study, limitations included changing the method to an online survey as opposed to a face-to-face interview. Traditionally, elicitation studies are completed as interviews to allow the researcher to probe responses and get a fulsome understanding of behaviour and its antecedents. However, given the sensitive and illegal nature of the subject of some of the questions, that is, asking about the antecedents of illegal behaviours, it would have been unethical to remove anonymity from the participants by having face-to-face interviews. Additionally, the student-researcher is an instructor at the undergraduate level and could have known the participants or would get to know participants in this other role as a teacher. This could have exposed the participants to undue stress and was considered unethical. As a result, it was determined for the safety of participants that this phase would be conducted as an online, open-ended survey, which did not allow for the

probing of the responses to ensure a fulsome understanding of the behaviours and their antecedents.

Some of the limitations of the second phase include: (a) the possible misinterpretation of the value question; (b) the difference in acceptability rating across the behaviours could have been due to an uncontrolled and unconsidered aspect of the behavioural scenario, for example, violence; (c) the operationalization of the proposed model; and (d) generalizability concerns. In terms of the possible misinterpretation of the value question, responses may have reflected the value of the group to the respondent, which was the expectation. However, for some respondents, the response may have reflected the value of the group relative to the behaviour.

The second limitation of the second phase could be that the difference in acceptability rating across the behaviours could have been due to an uncontrolled and unconsidered aspect of the behaviours. For example, the issue could have been that one behaviour is violent and the other two are not. As a result, the acceptability ratings could have been the degree of violence depicted in the scenario and not norming and legality. The third limitation is the operationalization of the proposed model for the SEM. In the proposed model, Social Identity Theory was operationalized by the Measure of Criminal Attitudes and Associates (Mills & Kroner, 1999) and endorsement of antisocial behaviours was operationalized by the Criminal Sentiments Scale (Andrews & Wormith, 1984). In reviewing the proposed SEM model, the Measures of Criminal Attitudes and Associates (Mills & Kroner, 1999) may be better for operationalizing the endorsement of antisocial behaviours. Social Identity in the form of group membership is also operationalized by the parent and friend group manipulation, so an additional operationalization may not have been necessary.

The fourth limitation of the study concerns low generalizability. Given the specificity of the antecedents to the sample and the norming of the behaviours to the friend group, the effects may not be generalizable beyond the sample. However, the findings that individuals can possess both prosocial and antisocial values and can enact either depending on the situational variables is generalizable. A review of further studies is reviewed below.

4.2 FURTHER STUDIES

Recognizing that this study was exploratory, replication of these findings is important. As a result, further studies investigating the framework of combining the Theory of Planned Behaviour (Ajzen, 1991), Social Identity Theory (Hogg, 2006), and Techniques of Neutralization

(Sykes & Matza, 1957) would add to the literature. Further studies with this framework that investigate whether the neutralization reinforces the salience of group membership and therefore group values as well as whether certain neutralizations prime specific valued groups would expand on the findings of this study.

This study investigated the five original neutralizations posited by Sykes and Matza (1957), however, there have been additional neutralizations posited subsequently, such as Defense of Necessity and Metaphor of the Ledger (Minor, 1981), Denial of the Necessity of the Law (Coleman, 2002), Claim of Normality (Coleman, 2002), Claim of Entitlement (Coleman, 2002), Justification by Comparison (Cromwell & Thurman, 2003) and Postponement (Cromwell & Thurman, 2003). Further studies that investigate these neutralizations would add to the literature on neutralizations, and by extension cognitions, that allow for the enactment of antisocial behaviour. According to the findings in this study, a prosocial population does not use Denial of Victim or Responsibility with physical assault so these neutralizations would not be a good point of intervention and it would be good to understand these findings to enhance our understanding of neutralization and therefore cognitions for enacting antisocial behaviour.

In phase I the limitation of not probing responses in a face-to-face interview can be mitigated in further studies by ensuring that the interviewer has no power differential relationship with potential participants. Another way to mitigate this change in methodology would be to have a phase after the elicitation study where the themes are explored with a similar sample to further enhance the understanding of the factors of the Theory of Planned Behaviour (Ajzen, 1991) and the valued group concerning the behaviours. A third way to mitigate this limitation might be to complete the coding of the results from the open-ended online survey and have the same participants review the completed analyses for their feedback veracity. The participation would remain online, and participants would be assigned a code that allows them to access the coded and analyzed data to verify an accurate depiction of their positions.

Given the possibility that the acceptability ratings for the behaviours could be a result of an unaccounted for aspect of the behaviours, for example, the violence in the behaviours, replicating the study is important. This replication would include ensuring that phase I questions are asked to grasp the differences between the behaviours to the respondents would ensure that all the possible characteristics of the behaviours being studied were clear. Replicating the study with participants of varying age groups as well as those who possess varying levels of

antisociality would also add to the literature on the use of neutralizations and the hardening process proposed by Sykes and Matza (1957). The hardening process suggests that at some point intervention is less effective and therefore prevention should be the focus. Given that six behaviours were investigated in phase I but only three behaviours were investigated in phase II, it would add to the literature to replicate phase II with the three behaviours of consensual sexting in a relationship, illicit drug use, and breaking and entering.

4.3 CONCLUSION

This study adds to the literature in that it presents empirical support that antisocial behaviour is based on the consideration of situational variables that include neutralization, behavioural type, and salient valued group. It also questions the use of demographic data as dispositional factors in the General Personality and Cognitive Social Learning (Andrews & Bonta, 2003). Demographic data are static and therefore unchanging. However, the situational variables that the demographic variables are a proxy for are dynamic. Examples of these include exposure to antisocial associates and neighbourhoods with high crime rates, and exposure is also indicated in the General Personality and Cognitive Social Learning (Andrews & Bonta, 2003). The overrepresentation of specific demographic groups in the justice system is discussed in media regularly but it is not discussed in terms of the overexposure of those groups to situational variables, which increase their risk of contact with the justice system. This is good news for intervention and prevention policy. More specifically, it sheds light on the importance of policy that is geared towards prevention. Reducing the exposure of those same demographics to situational variables such as high crime neighbourhoods and antisocial associates will therefore reduce the possibility of developing antisocial attitudes.

Additional findings from the study indicate that individuals can possess both antisocial and prosocial attitudes, either of which can be enacted depending on the situation. These findings have implications for policy in that they can determine how intervention is practised within the justice system, and how important social programs are to the prevention of antisocial behaviours. The evidence from this study highlights the importance of policy to prevent the development of antisocial attitudes. That is, it demonstrates the importance of limiting the exposure of individuals to the situational variables that increase the risk of antisocial and criminal conduct. The prevention of crime is possible with policies that are built on empirical evidence such as those found in this study.

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APPENDIX A

PHASE I INFORMED CONSENT

When would you engage in antisocial behaviours? (E29)

You are invited to participate in a research study entitled 'A multifaceted explanation of Antisocial Behaviours'. Please read this form carefully, and feel free to ask any questions you might have about the study by contacting the researchers using the information below. Please print off a copy of this form for your records.

Student- Researcher:	Supervisor:
Giselle Patrick,	Dr. Steve Wormith,
Department of Psychology,	Department of Psychology,
giselle.patrick@usask.ca	s.wormith@usask.ca
	306 966 6818

Purpose & Procedure: The study is designed to examine possible precursors to antisocial behaviours. The information gathered in this investigation will then lead to the development of future studies examining this issue further. If you decide to participate, you will be asked to respond to several questions. Please feel free to leave unanswered any questions that make you feel uncomfortable.

Risks: There are no known risks associated with participation in this study. The questions in this study ask about antisocial behaviours, of which some are illegal behaviours. There will be no identifying information associated with your responses, therefore there are no risks associated with reporting activities or anticipation of activities. There is the possibility that the questions are triggering for participants as they do ask about antisocial behaviours. If you do experience negative emotions or psychological responses to any question, feel free to not respond to that question, but also it is recommended you contact Saskatoon Crisis Intervention Service at their 24-hour line: 306 933 6200. Furthermore, you may receive no personal benefits from participation in the study.

Compensation: If you decide to participate and are registered in a course enrolled in the Psychology Participant Pool, you will be awarded 2 credits towards your Introductory Psychology bonus marks for

research study participation. Your NSID cannot be linked to your survey data; we will only know that you have participated by reviewing who has accessed the link through the Introductory Psychology Participant pool.

Confidentiality: Your information is completely anonymous, and we will not ask you for any identifying information. Your responses will only be used as part of a larger data set. All of the data from the survey will be securely stored for five years and then it will be destroyed beyond recovery through Eraser, a free file eraser program that overwrites the deleted files on personal computers/laptops and portable media. Eraser is an advanced security tool for Windows which allows individuals to completely remove sensitive data from their hard drive by overwriting it several times with carefully selected patterns. The data collected for this study may be published in an academic journal and/or presented at a professional conference. This survey is hosted by SurveyMonkey, a company located in the USA and subject to US laws and whose servers are located outside of Canada. The privacy of the information you provide is subject to the laws of those other jurisdictions. By participating in this survey, you acknowledge and agree that your answers/information will be stored and accessed outside of Canada and may or may not receive the same level of privacy protection.

Right to withdraw: You may withdraw from the study for any reason, at any time before submitting the data, without penalty of any sort and/or without loss of research credit. If you wish to withdraw from the study simply close your web-browser without submitting your data. However, due to the anonymous nature of the database, you will not be able to withdraw after you have submitted your data because of the inability to identify the data of any specific individual.

Questions: If you have any questions concerning the study, please feel free to ask at any point by contacting the researchers by email. You are also free to contact the researchers at the numbers provided above if you have questions at a later time. This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board (Beh-REB). Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office (ethics.office@usask.ca (306) 966-2975; toll-free 1 (888) 966-2975). You may obtain a copy of the results of the study by contacting the student-researcher or supervisor.

Consent to Participate: I have read and understood the description of the research study provided above. I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I agree to participate in the study described above, understanding that I may withdraw my consent to participate at any time before submitting my data. PLEASE TAKE A COPY OF THIS PAGE

FOR YOUR RECORDS. YOU MAY ALSO EMAIL THE RESEARCHERS TO OBTAIN A COPY OF THIS PAGE (giselle.patrick@usask.ca; s.wormith@usask.ca).

Yes, I have read and understood the terms of the consent form and consent to participate

No, I do not want to participate

APPENDIX B

PHASE I QUESTIONNAIRE

For this study, you are being asked about six behaviours. For each behaviour, you will be asked a series of 9 questions. Please respond to each question as honestly as possible. You will be asked for demographic information. That information will be used to understand your responses (in aggregate), to the previous questions. Please answer as truthfully and as accurately as possible. Thank you for your participation!

Behaviour: Consensual sexting in an intimate relationship

Please take a few minutes to tell us what you think about consensual sexting in an intimate relationship. We are merely interested in your personal opinions. In response to the questions below, please list the thoughts that come immediately to your mind. Write each thought on a separate line.

1. What do you see as the advantages of consensual sexting in an intimate relationship?

2. What do you see as the disadvantages of consensual sexting in an intimate relationship?

3. What else comes to mind when you think about consensual sexting in an intimate relationship?

For the following four (4) questions please use the following groups when asked to indicate which groups: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

When it comes to consensual sexting in an intimate relationship, there might be individuals or groups who would think this is acceptable or non-acceptable behaviour.

Group Options: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

Value Indication: Please also indicate the value of the group to you using the following rating scale: High Value, Moderate Value, Low Value, No value.

For example, if the groups who approve fall within your social recreational friends and they are moderately valuable to you, you would state the group as social recreational friends and indicate moderate value. Please do this for each group you list.

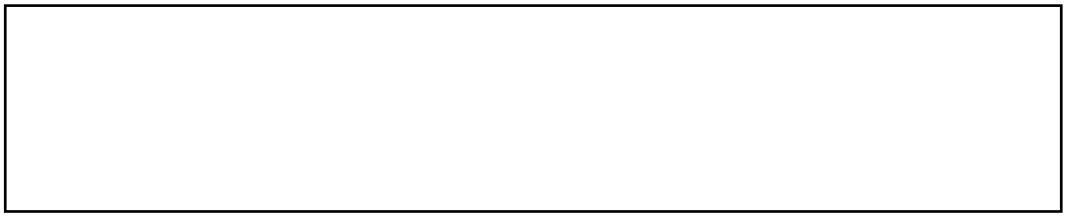
4. Please list the groups (options listed above) who would approve of consensual sexting in an intimate relationship.

5. Please list the groups (for example some friends, some family members, some acquaintances) who would disapprove of consensual sexting in an intimate relationship.

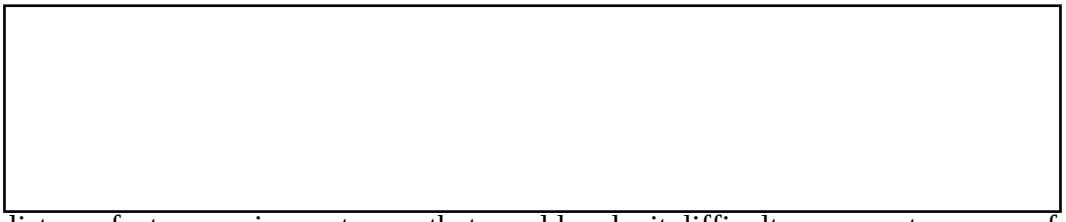
Sometimes, when we are not sure what to do, we look to see what others are doing.

6. Please list the groups who you think, for whatever reason, are most likely to consensually sext in an intimate relationship.

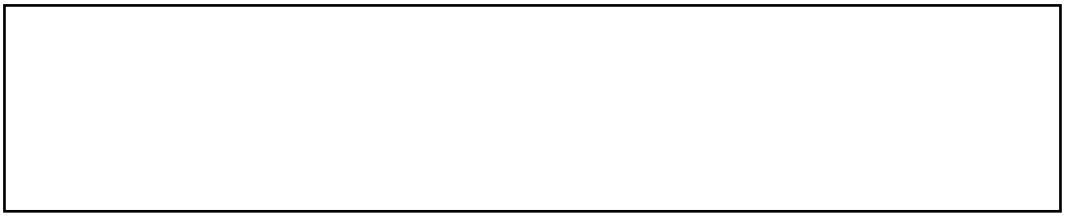
7. Please list the individuals or groups who you think, for whatever reason, are least likely to consensually sext in an intimate relationship.



8. Please list any factors or circumstances that would make it easy or enable someone to consensually sext in an intimate relationship.



9. Please list any factors or circumstances that would make it difficult or prevent someone from consensually sexting in an intimate relationship.



Behaviour: Video record or photograph people in public places

Please take a few minutes to tell us what you think about video recording or photographing people in public places. We are merely interested in your personal opinions. In response to the questions below, please list the thoughts that come immediately to your mind. Write each thought on a separate line.

1. What do you see as the advantages of video recording or photographing people in public places?

2. What do you see as the disadvantages of video recording or photographing people in public places?

3. What else comes to mind when you think about video recording or photographing people in public places?

For the following four (4) questions please use the following groups when asked to indicate which groups: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

When it comes to video recording or photographing people in public places, there might be individuals or groups who would approve as well as those who would disapprove.

Group Options: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

Value Indication: Please also indicate the value of the group to you using the following rating scale: High Value, Moderate Value, Low Value, No value.

For example, if the groups who approve fall within your social recreational friends and they are moderately valuable to you, you would state the group as social recreational friends and indicate moderate value. Please do this for each group you list.

4. Please list the groups (options listed above) who would approve of video recording or photographing people in public places.

5. Please list the groups (options listed above) who would disapprove of video recording or photographing people in public places.

Sometimes, when we are not sure what to do, we look to see what others are doing.

6. Please list the groups who you think, for whatever reason, are most likely to video record or photograph people in public places.

7. Please list the individuals or groups who you think, for whatever reason, are least likely to video record or photograph people in public places.

8. Please list any factors or circumstances that would make it easy or enable you to video record or photograph people in public places.

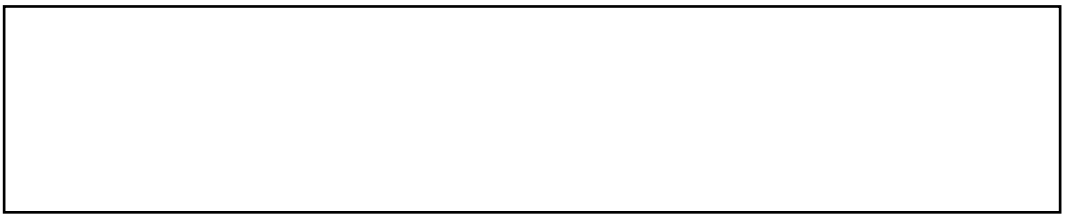
9. Please list any factors or circumstances that would make it difficult or prevent you from video record or photograph people in public places.

Behaviour: Illicit Drug Use

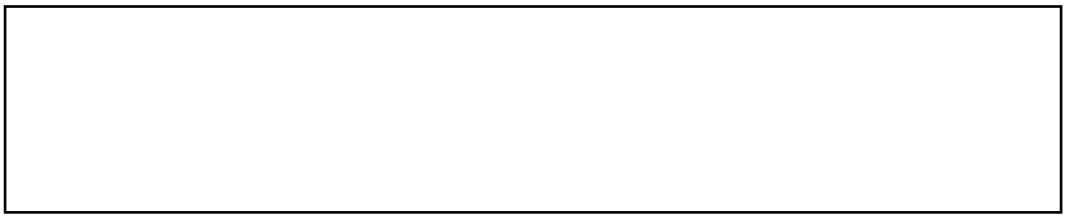
Please take a few minutes to tell us what you think about illicit drug use. We are merely interested in your personal opinions. In response to the questions below, please list the thoughts that come immediately to your mind. Write each thought on a separate line.

1. What do you see as the advantages of illicit drug use?

2. What do you see as the disadvantages of illicit drug use?



3. What else comes to mind when you think about illicit drug use?



For the following four (4) questions please use the following groups when asked to indicate which groups: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

When it comes to *your* illicit drug use, there might be individuals or groups who would think you should or should not perform this behaviour.

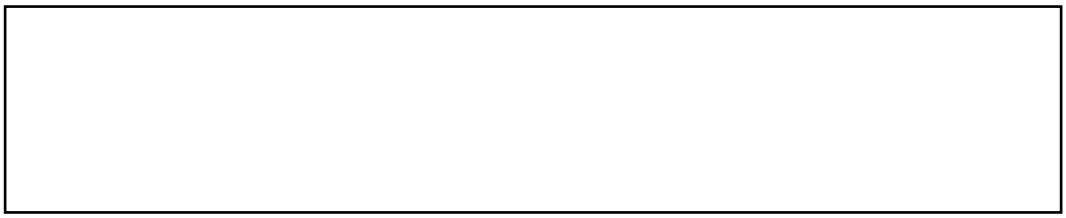
Group Options: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

Value Indication: Please also indicate the value of the group to you using the following rating scale: High Value, Moderate Value, Low Value, No value.

For example, if the groups who approve fall within your social recreational friends and they are moderately valuable to you, you would state the group as social recreational friends and indicate moderate value. Please do this for each group you list.

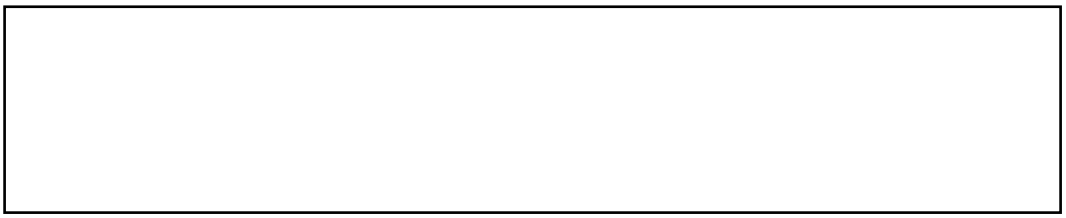
4. Please list the groups (options listed above) who would approve of illicit drug use.

5. Please list the groups (options listed above) who would disapprove of illicit drug Use.



Sometimes, when we are not sure what to do, we look to see what others are doing.

6. Please list the groups who you think, for whatever reason, are most likely to use illicit drugs.



7. Please list the groups who you think, for whatever reason, are least likely to use illicit drugs.

8. Please list any factors or circumstances that would make it easy or enable someone to use illicit drugs.

9. Please list any factors or circumstances that would make it difficult or prevent someone from using illicit drugs.

Behaviour: Texting while Driving

Please take a few minutes to tell us what you think about texting while driving. We are merely interested in your personal opinions. In response to the questions below, please list the thoughts that come immediately to your mind. Write each thought on a separate line.

1. What do you see as the advantages of texting while driving?

2. What do you see as the disadvantages of texting while driving?

3. What else comes to mind when you think about texting while driving?

For the following four (4) questions please use the following groups when asked to indicate which groups: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

When it comes to your texting while driving, there might be individuals or groups who would think you should or should not perform this behaviour.

Group Options: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

Value Indication: Please also indicate the value of the group to you using the following rating scale: High Value, Moderate Value, Low Value, No value.

For example, if the groups who approve fall within your social recreational friends and they are moderately valuable to you, you would state the group as social recreational friends and indicate moderate value. Please do this for each group you list.

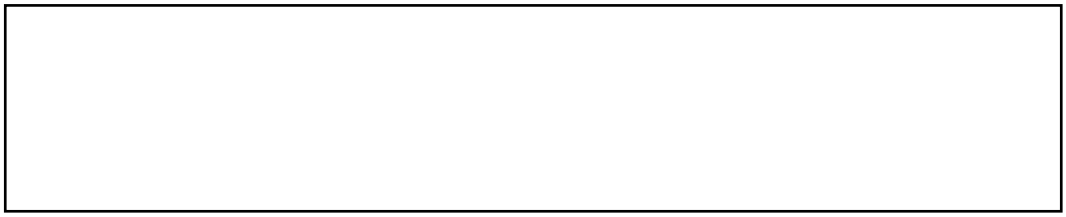
4. Please list the groups (options listed above) who would approve of texting while driving.

5. Please list the groups (options listed above) who would disapprove of texting while driving.

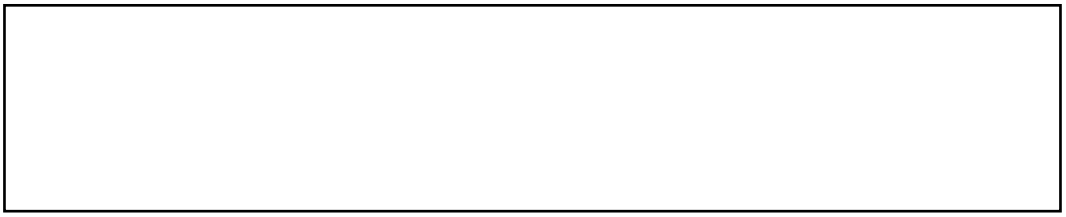
Sometimes, when we are not sure what to do, we look to see what others are doing.

6. Please list the groups who you think, for whatever reason, are most likely to text while driving.

7. Please list the groups who you think, for whatever reason, are least likely to text while driving.



8. Please list any factors or circumstances that would make it easy or enable someone to text while driving.

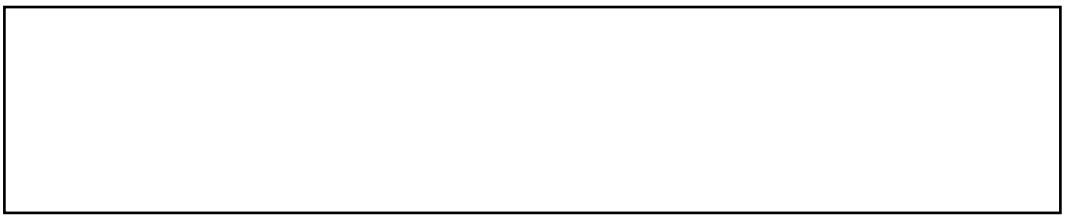


9. Please list any factors or circumstances that would make it difficult or prevent someone from texting while driving.

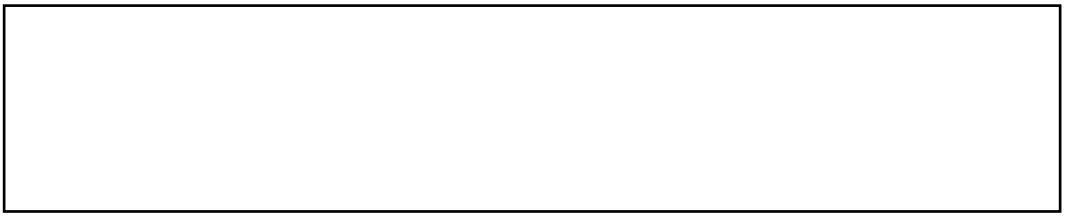
Behaviour: Breaking and Entering

Please take a few minutes to tell us what you think about breaking and entering. We are merely interested in your personal opinions. In response to the questions below, please list the thoughts that come immediately to your mind. Write each thought on a separate line.

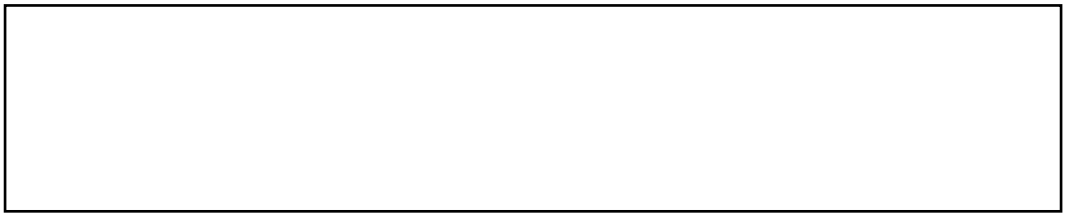
1. What do you see as the advantages of breaking and entering?



2. What do you see as the disadvantages of breaking and entering?



3. What else comes to mind when you think about breaking and entering?



For the following four (4) questions please use the following groups when asked to indicate which groups: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

When it comes to *your* breaking and entering, there might be individuals or groups who would think you should or should not perform this behaviour.

Group Options: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

Value Indication: Please also indicate the value of the group to you using the following rating scale: High Value, Moderate Value, Low Value, No value.

For example, if the groups who approve fall within your social recreational friends and they are moderately valuable to you, you would state the group as social recreational friends and indicate moderate value. Please do this for each group you list.

4. Please list the groups (options listed above) who would approve of breaking and entering?

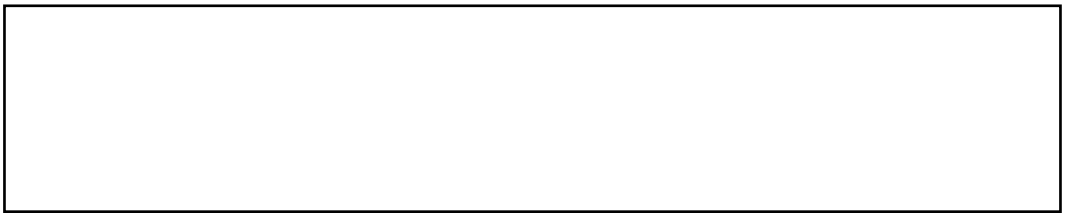
5. Please list the groups (options listed above) who would disapprove of breaking and entering?

Sometimes, when we are not sure what to do, we look to see what others are doing.

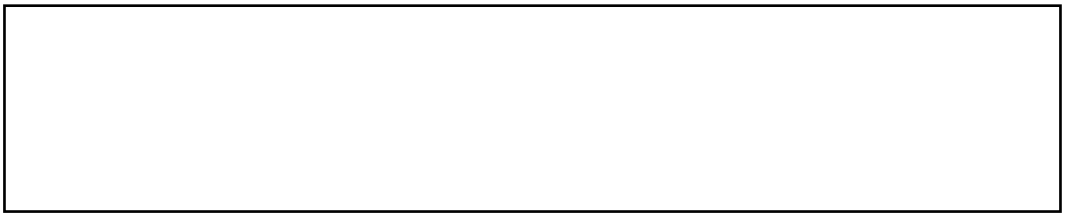
6. Please list the groups who you think, for whatever reason, are most likely to break and enter.

7. Please list the groups who you think, for whatever reason, are least likely to break and enter.

8. Please list any factors or circumstances that would make it easy or enable someone to break and enter.



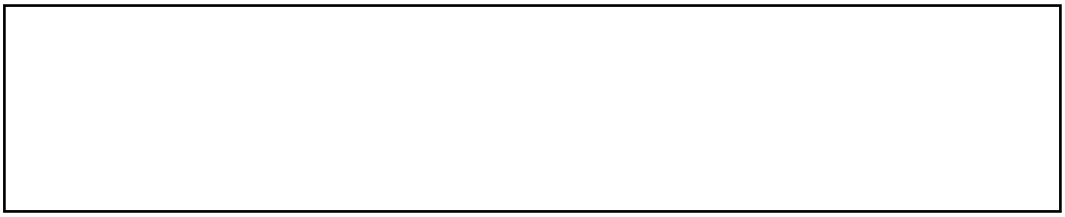
9. Please list any factors or circumstances that would make it difficult or prevent someone from breaking and entering.



Behaviour: Physical Assault

Please take a few minutes to tell us what you think about physical assault. We are merely interested in your personal opinions. In response to the questions below, please list the thoughts that come immediately to your mind. Write each thought on a separate line.

1. What do you see as the advantages of physical assault?



2. What do you see as the disadvantages of physical assault?

3. What else comes to mind when you think about physical assault?

For the following four (4) questions please use the following groups when asked to indicate which groups: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

When it comes to *your* enacting physical assault, there might be individuals or groups who would think you should or should not perform this behaviour.

Group Options: parents, siblings, cousins, extended parental family, friends, social recreational friends, acquaintances and colleagues.

Value Indication: Please also indicate the value of the group to you using the following rating scale: High Value, Moderate Value, Low Value, No value.

For example, if the groups who approve fall within your social recreational friends and they are moderately valuable to you, you would state the group as social recreational friends and indicate moderate value. Please do this for each group you list.

4. Please list the groups (options listed above) who would approve of physically assault someone.

5. Please list the groups (options listed above) who would disapprove of physically assault someone:

Sometimes, when we are not sure what to do, we look to see what others are doing.

6. Please list the groups who you think, for whatever reason, are most likely to physically assault someone else:

7. Please list the groups who you think, for whatever reason, are least likely to physically assault someone else:

8. Please list any factors or circumstances that would make it easy or enable someone to physically assault someone:

9. Please list any factors or circumstances that would make it difficult or prevent someone from physically assaulting someone:

Demographic Data

1. Age - open-ended (years)
2. Sex - open ended
3. Gender - open ended
4. Race – open ended
5. Ethnicity – open ended
6. Marital Status – open ended

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY! ☺

APPENDIX C

PHASE II INFORMED CONSENT

You are invited to participate in a research study entitled a Multifaceted Explanation of Antisocial Behaviours.

Please read this form carefully, and feel free to ask any questions you might have about the study by contacting the researchers using the information below. Please print off a copy of this form for your records.

Student- Researcher:

Giselle Patrick, Department of Psychology, giselle.patrick@usask.ca

Supervisor:

Dr. Tammy Marche

Department of Psychology and STM, tmarche@stmcollege.ca

306 966 8076

Purpose & Procedure: The study is designed to examine possible precursors to antisocial behaviours. The information gathered in this investigation will then lead to the development of future studies examining this issue further. If you decide to participate, you will be asked to respond to several questions. Please feel free to leave unanswered any questions that make you feel uncomfortable.

Risks: There are no known risks associated with participation in this study. The questions in this study ask about antisocial behaviours, of which some are illegal behaviours. There will be no identifying information associated with your responses, therefore there are no risks associated with reporting activities or anticipation of activities. There is the possibility that the questions are triggering for participants as they do ask about antisocial behaviours. If you do experience negative emotions or psychological responses to any question, feel free to not respond to that question, but also it is recommended you contact Saskatoon Crisis Intervention Service at their 24-hour line: 306 933 6200. Furthermore, you may receive no personal benefits from participation in the study.

Compensation: If you decide to participate and are registered in a course enrolled in the Psychology Participant Pool, you will be awarded 1 credit towards your Introductory Psychology bonus marks for research study participation. Your NSID cannot be linked to your survey data; we will only know that you have participated by reviewing who has accessed the link through the Introductory Psychology Participant pool.

Confidentiality: Your information is completely anonymous, and we will not ask you for any identifying information. Your responses will only be used as part of a larger data set. All of the data from the survey will be securely stored for five years and then it will be destroyed beyond recovery through Eraser, a free file eraser program that overwrites the deleted files on personal computers/laptops and portable media. Eraser is an advanced security tool for Windows which allows individuals to completely remove sensitive data from their hard drive by overwriting it several times with carefully selected patterns. The data collected for this study may be published in an academic journal and/or presented at a professional conference. This survey is hosted by SurveyMonkey, a company located in the USA and subject to US laws and whose servers are located outside of Canada. The privacy of the information you provide is subject to the laws of those other jurisdictions. By participating in this survey, you acknowledge and agree that your answers/information will be stored and accessed outside of Canada and may or may not receive the same level of privacy protection.

* Consent to Participate: I have read and understand the description of the research study provided above. I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I agree to participate in the study described above, understanding that I may withdraw my consent to participate at any time prior to submitting my data. PLEASE TAKE A COPY OF THIS PAGE FOR YOUR RECORDS. YOU MAY ALSO EMAIL THE RESEARCHERS TO OBTAIN A COPY OF THIS PAGE

(giselle.patrick@usask.ca; tmarche@stmcollege.ca).

- ○ Yes, I have read and understood the terms of the consent form and consent to participate
- ○ No, I do not want to participate

APPENDIX D

NEUTRALIZATION MEASURE - REVISED

There are several scenarios. Please read through each and rate how acceptable you find each of the behaviours in the scenario. The acceptability options range from Very Unacceptable (first) to Very Acceptable (last). Please respond to all items.

A. Recording / Photographing persons in Public with parents.

1 Scenario: A person, when out with friends, uses a camera phone to take pictures or make videos (recordings) of people who are in public.

Please use the rating scale to indicate the acceptability of the behaviours to you. Please consider each subsequent explanation for the behaviour separately:

	Very Unacceptable	Somewhat Unacceptable	Neither Unacceptable nor Acceptable	Somewhat Acceptable	Very Acceptable
How acceptable is the person's recording of people in public? (control)					
How acceptable do you imagine recording or photographing people in public would be to the majority of your *friends*?					
It is an exception of being in public in 2019. How acceptable is the person's recording of people in public? (DoR)					
The person believes there is no issue with recording					

	Very Unacceptable	Somewhat Unacceptable	Neither Unacceptable nor Acceptable	Somewhat Acceptable	Very Acceptable
people in public because no one is being harmed or injured by the behaviour. How acceptable is the person's recording of people in public (DoI)					
The person believes that the recordings do not hurt anyone. How acceptable is the person's recording of people in public?					
The person believes that there are cameras everywhere in public, so one more camera making a recording will make no difference. How acceptable is the person's recording of people in public?					
The recordings are for entertainment purposes. How acceptable is the person's recording of people in public?					
The person uses the recordings to make altered					

	Very Unacceptable	Somewhat Unacceptable	Neither Unacceptable nor Acceptable	Somewhat Acceptable	Very Acceptable
nude images of the persons who appear in the recordings. How acceptable is the person's recording of people in public?					

	High Value	Moderate Value	Low Value	No Value
How valuable were ***friends*** to you in deciding on the acceptability of the person's behaviour of recording people in public?				

B. Recording / Photographing persons in Public with parents.

2. Scenario: A person, while on vacation with parents, uses a camera phone to take pictures or make videos (recordings) of people who are in public.

Please use the rating scale to indicate the acceptability of the behaviours to you. Please consider each subsequent explanation for the behaviour separately:

	Very Unacceptable	Somewhat Unacceptable	Neither Unacceptable nor Acceptable	Somewhat Acceptable	Very Acceptable
How acceptable is the					

person's recording of people in public?					
The person sees nothing wrong with recording people in public. It is an expectation of being in public in 2019. How acceptable is the person's recording of people in public? (DoR)					
The person believes there is no issue with recording people in public because no one is being harmed or injured by the behaviour. How acceptable is the person's recording of people in public? (DoI)					
The person believes that the recordings do not hurt anyone. How acceptable is the person's recording of people in public? (DoV)					
The person believes that there are cameras everywhere in public, so one more camera recording will make no difference. How acceptable is the person's recording of people in public? (Condemn)					

The person uses the recordings for entertainment. How acceptable is the person's recording of people in public? (AHL)					
The person uses the recordings to make altered nude images of the persons who appear in the recordings. How acceptable is the person's recording of people in public? (control)					

	High Value	Moderate Value	Low Value	No Value
How valuable were parents to you in deciding on the acceptability of the person's behaviour of recording people in public?				

B. Texting while Driving with Friends

1. **Scenario:** A person was driving to a concert with friends and received a message and responded to it while driving.

   Please use the rating scale to indicate the acceptability of the behaviours to you. Please consider each subsequent explanation for the behaviour separately:

	Very Unacceptable	Somewhat Unacceptable	Neither Unacceptable nor Acceptable	Somewhat Acceptable	Very Acceptable
How acceptable is the person's texting while driving?					
How acceptable do you imagine this behaviour of texting while driving would be to the majority of your friends?					
A person was driving to a concert with friends and received a message and responded to it while driving. The person had to respond to the text. How acceptable is a person's texting while driving? (DoR)					
A person was driving to a concert with friends and received a message and responded to it while driving. No one was hurt while the person texted and drove. How acceptable is the person's texting while driving? (DoI)					
A person was driving to a					

	Very Unacceptable	Somewhat Unacceptable	Neither Unacceptable nor Acceptable	Somewhat Acceptable	Very Acceptable
concert with friends and received a message and responded to it while driving. Someone was waiting on the person's response. How acceptable is the person's texting while driving? (DoV)					
Pete knows police officers who use illicit (illegal) drugs, so he does not see why he should not (condemn)					
A person was driving to a concert with friends and received a message and responded to it while driving. The person thinks it is the same as the police using their radios while driving. How acceptable is the person’s texting while driving? (AHL)					
A person was driving to a concert with friends and received a message and					

	Very Unacceptable	Somewhat Unacceptable	Neither Unacceptable nor Acceptable	Somewhat Acceptable	Very Acceptable
responded to it while driving. The person thinks it is the same as the police using their radios while driving. How acceptable is the person's texting while driving? (Condemn)					
A person was driving to a concert with friends and received a message and responded to it while driving. The person was stopped at a red light when responding to a text. How acceptable is the person's texting while driving? ()					
A person was driving to a concert with friends and received a message and responded to it while driving. The person texts while driving all the time. How acceptable is the person's texting while driving? (control)					

	High Value	Moderate Value	Low Value	No Value
How valuable were friends to you in deciding on the acceptability of the person's behaviour of texting while driving with friends to a concert?				

B. Texting while Driving with Parents

2. Scenario: A person was driving home for dinner with their parents and received a message and responded to it while driving.

Please use the rating scale to indicate the acceptability of the behaviours to you. Please consider each subsequent explanation for the behaviour separately:

	Not at all acceptable	Slightly Acceptable	Moderately Acceptable	Very Acceptable	Completely Acceptable
How acceptable is the person's texting while driving?					
How acceptable do you imagine this behaviour of texting while driving would be to your parents?					
The person had to respond to the text. How acceptable is the person's texting while driving? (DoR)					
No one was hurt while the person texted and drove. How acceptable is the					

	Not at all acceptable	Slightly Acceptable	Moderately Acceptable	Very Acceptable	Completely Acceptable
person's texting while driving? (DoI)					
Someone was waiting on the person's response. How acceptable is the person's texting while driving? (AHL)					
The person thinks it is the same as the police using their radios while driving. How acceptable is the person's texting while driving (condemn)					
The person was stopped at a red light when responding to a text. How acceptable is the person's texting while driving? (DoV)					
The person texts while driving all the time. How acceptable is the person's texting while driving? (Control).					

	High Value	Moderate Value	Low Value	No Value
How valuable were parents to you in making your decisions about the acceptability of the behaviour of texting while driving home to parents for dinner?				

C. Illegal and Not Normed to the Group

1. Physical Assault with Friends

Scenario: A person went to a bar one night with friends and physically assaulted someone. Please use the rating scale to indicate the acceptability of the behaviours to you. Please consider each subsequent explanation for the behaviour separately:

	Not at all acceptable	Slightly Acceptable	Moderately Acceptable	Very Acceptable	Completely Acceptable
How acceptable is the person's behaviour to you?					
How acceptable do you imagine physically assaulting someone would be to the majority of your friends? (control)					
The altercation ended with no one seriously hurt. How acceptable is the first person's physically assaulting someone? (DoI)					
It was self-defence and the other person started it. How acceptable is the first					

	Not at all acceptable	Slightly Acceptable	Moderately Acceptable	Very Acceptable	Completely Acceptable
person's physically assaulting someone? (DoR)					
The person had to engage in self-defence with friends watching. How acceptable is the first person's physically assaulting someone? (DoV)					
Police brutalize people all the time. How acceptable is the person's physically assaulting someone? (condemn)					
Said person was dealing with tragedy and was not thinking rationally. How acceptable is the person's physically assaulting someone? (DoR)					
Said person physically assaults someone every weekend. How acceptable is that person's physically assaulting someone? (control)					

	High Value	Moderate Value	Low Value	No Value
How valuable were friends to you in making your decisions about the acceptability of the person's physically assaulting someone when out with friends at a bar?				

2. Physical Assault with Parents

Scenario: A person was out with their parents and physically assaulted someone.

Please use the rating scale to indicate the acceptability of the behaviours to you. Please consider each subsequent explanation for the behaviour separately:

	Not at all acceptable	Slightly Acceptable	Moderately Acceptable	Very Acceptable	Completely Acceptable
How acceptable is the person's behaviour to you?					
How acceptable do you imagine physically assaulting someone would be to the majority of your friends? (control)					
The altercation ended with no one seriously hurt. How acceptable is the first person's physically assaulting someone? (DoI)					
It was self-defence and the other person started it. How acceptable is the first person's physically assaulting someone?					

	Not at all acceptable	Slightly Acceptable	Moderately Acceptable	Very Acceptable	Completely Acceptable
(DoR)					
The person had to engage in self-defence with friends watching. How acceptable is the first person's physically assaulting someone? (DoV)					
Police brutalize people all the time. How acceptable is the person's physically assaulting someone? (condemn)					
Said person was dealing with tragedy and was not thinking rationally. How acceptable is the person's physically assaulting someone? (DoR)					
Said person physically assaults someone every weekend. How acceptable is that person's physically assaulting someone? (control)					

	High Value	Moderate Value	Low Value	No Value
How valuable were parents to you in making your decisions about the acceptability of the person's physically assaulting someone when out with friends at a bar?				

APPENDIX E

CRMINAL SENTIMENTS SCALE

INSTRUCTIONS

This is not a test and there are no 'right' or 'wrong' answers.

Following are some statements with which you may agree or disagree. Circle the answer which best represents your general feeling or the way you usually feel.

If you STRONGLY AGREE	Circle……..SA
If you AGREE	Circle…….. A
If you are not sure or UNDECIDED	Circle…….. U
If you DISAGREE	Circle…….. D
If you STRONG DISAGREE	Circle……..SD

Please indicate your feelings about every statement by circling one of the five (5) answers; that is, please answer every question by circling one of the five phrases.

For each statement circle the appropriate answer according to how you feel about it.

	STRONGLY AGREE	AGREE	UN-DECIDED	DISAGREE	STRONGLY DISAGREE
1. Laws are so often made for the benefit of small selfish groups that a person cannot respect the law.	SA	A	U	D	SD
2. Nearly all laws deserve our respect.	SA	A	U	D	SD
3. It is our duty to obey all laws.	SA	A	U	D	SD
4. Laws are usually bad.	SA	A	U	D	SD
5. The law is rotten to the core.	SA	A	U	D	SD
6. Almost any jury can be fixed.	SA	A	U	D	SD
7. You can't get justice in court.	SA	A	U	D	SD
8. On the whole, lawyers are honest.	SA	A	U	D	SD
9. Fake witnesses are often produced by the prosecution.	SA	A	U	D	SD
10. On the whole, policemen are honest.	SA	A	U	D	SD
11. A cop is a friend to people in need.	SA	A	U	D	SD
12. Life would be better with fewer policemen.	SA	A	U	D	SD
13. Policemen should be paid more for their work.	SA	A	U	D	SD
14. Policemen are just as crooked as the people					

they arrest.	SA	A	U	D	SD
15. All laws should be strictly obeyed because they are laws.	SA	A	U	D	SD
16. The law does not benefit the common person.	SA	A	U	D	SD
17. The law as a whole is sound.	SA	A	U	D	SD
18. In the long run law and justice are the same.	SA	A	U	D	SD
19. The law enslaves the majority of people for the benefit of a few.	SA	A	U	D	SD
20. On the whole judges are honest and kindhearted.	SA	A	U	D	SD
21. Court decisions are almost always just.	SA	A	U	D	SD
22. Almost anything can be fixed in the courts if you have enough money.	SA	A	U	D	SD
23. A judge is a good person	SA	A	U	D	SD
24. Our society would be better off it there were more policemen.	SA	A	U	D	SD
25. Police rarely try to help people.	SA	A	U	D	SD
26. Sometimes a guy like me has to break the law in order to get ahead.	SA	A	U	D	SD
27. Most successful people used illegal means to become successful.	SA	A	U	D	SD
28. People who have been in trouble with the law have					

the same sort of ideas about life that I have.	SA	A	U	D	SD
29. A person should always obey the law no matter how much it interferes with his personal ambition.	SA	A	U	D	SD
30. I would rather associate with people that obey the law than those that don't.	SA	A	U	D	SD
31. It's alright for a person to break the law if he doesn't get caught.	SA	A	U	D	SD
32. I'm more like the people who can make a living outside the law than I am like those who only break the law occasionally.	SA	A	U	D	SD
33. Most people would commit crimes if they know they wouldn't get caught.	SA	A	U	D	SD
34. People who have been in trouble with the law are more like me than people who don't have trouble with the law.	SA	A	U	D	SD
35. There never is a good cause for breaking the law.	SA	A	U	D	SD
36. I don't have much in common with people who never break the law.	SA	A	U	D	SD
37. A hungry person has the right to steal.	SA	A	U	D	SD
38. It's alright to evade the law if you don't actually violate it.	SA	A	U	D	SD

39. No person can violate the law and be my friend.	SA	A	U	D	SD
40. A person should obey only those laws which seem reasonable.	SA	A	U	D	SD
41. A person is a fool to work for a living if he or she can get by some easier way; even if it means violating the law.	SA	A	U	D	SD

APPENDIX F

MEASURE OF CRIMINAL ATTITUDES AND ASSOCIATES

This questionnaire has two parts (Part A and Part B). The first part asks some questions about your friends and acquaintances. The second part is a series of statements for which you can respond by showing whether you agree or disagree with the statement. There are no right or wrong answers. Please answer all the questions.

Part A

Consider the 4 adults you spend the most time with in the community, when you answer Part A. No names please of the people you are referring to. Then answer the questions to the best of your knowledge.

1A. How much of your free time do you spend with person #1? (Please Circle Your Answer)
less than 25% 25% - 50% 50% - 75% 75% - 100%
B. Has person #1 ever committed a crime? Yes No
C. Does person #1 have a criminal record? Yes No
D. Has person #1 ever been to jail? Yes No
E. Has person #1 tried to involve you in a crime? Yes No

2.A. How much of your free time do you spend with person #2? (Please Circle Your Answer)
less than 25% 25% - 50% 50% - 75% 75% - 100%
B. Has person #2 ever committed a crime? Yes No
C. Does person #2 have a criminal record? Yes No
D. Has person #2 ever been to jail? Yes No
E. Has person #2 tried to involve you in a crime? Yes No

3.A. How much of your free time do you spend with person #3? (Please Circle Your Answer)
less than 25% 25% - 50% 50% - 75% 75% - 100%
B. Has person #3 ever committed a crime? Yes No

C. Does person #3 have a criminal record? Yes No

D. Has person #3 ever been to jail? Yes No

E. Has person #3 tried to involve you in a crime? Yes No

4.A. How much of your free time do you spend with person #4? (Please Circle Your Answer)

less than 25% 25% - 50% 50% - 75% 75% - 100%

B. Has person #4 ever committed a crime? Yes No

C. Does person #4 have a criminal record? Yes No

D. Has person #4 ever been to jail? Yes No

E. Has person #4 tried to involve you in a crime? Yes No

Part B

Please Answer All the Questions

A = Agree D = Disagree (Circle One Answer)

A D 1. It's understandable to hit someone who insults you.

A D 2. Stealing to survive is understandable.

A D 3. I am not likely to commit a crime in the future.

A D 4. I have a lot in common with people who break the law.

A D 5. There is nothing wrong with beating up a child molester.

A D 6. A person is right to take what is owed them, even if they have to steal it.

A D 7. I would keep any amount of money I found.

A D 8. None of my friends have committed crimes.

A D 9. Sometimes you have to fight to keep your self-respect.

A D 10. I should be allowed to decide what is right and wrong.

A = Agree D = Disagree (Circle One Answer)

A D 11. I could see myself lying to the police.

A D 12. I know several people who have committed crimes.

A D 13. Someone who makes you very angry deserves to be hit.

A D 14. Only I should decide what I deserve.

A D 15. In certain situations I would try to outrun the police.

A D 16. I would not steal, and I would hold it against anyone who does.

A D 17. People who get beat up usually had it coming.

A D 18. I should be treated like anyone else no matter what I've done.

A D 19. I would be open to cheating certain people.

A D 20. I always feel welcomed around criminal friends.

A D 21. It's all right to fight someone if they stole from you.

A D 22. It's wrong for a lack of money to stop you from getting things.

A D 23. I could easily tell a convincing lie.

A D 24. Most of my friends don't have criminal records.

A D 25. It's not wrong to hit someone who puts you down.

A D 26. A hungry man has the right to steal.

A D 27. Rules will not stop me from doing what I want.

A D 28. I have friends who have been to jail.

A D 29. Child molesters get what they have coming.

A D 30. Taking what is owed you is not really stealing.

A D 31. I would not enjoy getting away with something wrong.

A D 32. None of my friends has ever wanted to commit a crime.

A D 33. It's not wrong to fight to save face.

A D 34. Only I can decide what is right and wrong.

A D 35. I would run a scam if I could get away with it.

A D 36. I have committed a crime with friends.

A D 37. Someone who makes you really angry shouldn't complain if they get hit.

A = Agree D = Disagree (Circle One Answer)

A D 38. A person should decide what they deserve out of life.

A D 39. For a good reason, I would commit a crime.

A D 40. I have friends who are well known to the police.

A D 41. There is nothing wrong with beating up someone who asks for it.

A D 42. No matter what I've done, it's only right to treat me like everyone else.

A D 43. I will not break the law again.

A D 44. It is reasonable to fight someone who cheated you.

A D 45. A lack of money should not stop you from getting what you want.

A D 46. I would be happy to fool the police.

APPENDIX G

PAULHUS DECEPTION SCALE

BIDR Version 7 - Form 40A

Read each statement, and circle the number that best describes you, from *Not True* to *Very True* about you.

1	2	3	4	5
not true				very true

____ 1. My first impressions of people usually turn out to be right.
____ 2. It would be hard for me to break any of my bad habits.
____ 3. I don't care to know what other people really think of me.
____ 4. I have not always been honest with myself.
____ 5. I always know why I like things.
____ 6. When my emotions are aroused, it biases my thinking.
____ 7. Once I've made up my mind, other people cannot change my opinion.
____ 8. I am not a safe driver when I exceed the speed limit.
____ 9. I am fully in control of my own fate.
____ 10. It's hard for me to shut off a disturbing thought.
____ 11. I never regret my decisions.
____ 12. I sometimes lose out on things because I can't make up my mind soon enough.
____ 13. The reason I vote is because my vote can make a difference.
____ 14. People don’t seem to notice me and my abilities
____ 15. I am a completely rational person.
____ 16. I rarely appreciate criticism.
____ 17. I am very confident of my judgments
____ 18. I have sometimes doubted my ability as a lover.
____ 19. It's all right with me if some people happen to dislike me.
____ 20. I’m just an average person.
____ 21. I sometimes tell lies if I have to.

____ 22. I never cover up my mistakes.

____ 23. There have been occasions when I have taken advantage of someone.

____ 24. I never swear.

____ 25. I sometimes try to get even rather than forgive and forget.

____ 26. I always obey laws, even if I'm unlikely to get caught.

____ 27. I have said something bad about a friend behind his or her back.

____ 28. When I hear people talking privately, I avoid listening.

____ 29. I have received too much change from a salesperson without telling him or her.

____ 30. I always declare everything at customs.

____ 31. When I was young I sometimes stole things.

____ 32. I have never dropped litter on the street.

____ 33. I sometimes drive faster than the speed limit.

____ 34. I never read sexy books or magazines.

____ 35. I have done things that I don't tell other people about.

____ 36. I never take things that don't belong to me.

____ 37. I have taken sick-leave from work or school even though I wasn't really sick.

____ 38. I have never damaged a library book or store merchandise without reporting it.

____ 39. I have some pretty awful habits.

____ 40. I don't gossip about other people's business

APPENDIX H

DEMOGRAPHICS

1. Age - open ended (years)
2. Sex - open ended
3. Gender - open ended
4. Race – open ended then coded into white / non-white
5. Ethnicity – open ended
6. Marital Status – open ended